THE BODY
AND
THE ART OF LIFE MAINTENANCE

By

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This study investigated human development in the context of holistic therapeutic experiences. Philosophical and experimental literature have suggested that integration of somatic and psychological experience enhances human functioning on multiple levels. It was anticipated that persons involved in holistic modalities such as rolfing and Gestalt therapy would report positive movement on a variety of psychobiological measures.

To explore this possibility, subjects were recruited for a rolfing group (7 males, 7 females), a Gestalt group 7 females, 3 males), and nontreatment control group (7 males, 7 females). One week before and after treatment all subjects were administered a battery of psychological tests designed to tap into bodymind perceptions. The Holtzman inkblots were used to obtain barrier/penetration scores. All subjects completed human figure drawings,

which were assessed by trained raters. Subjects rated themselves on a variety of semantic differential scales for actual/ideal physical and psychological self-perceptions. In addition, they rated six problematic body areas. The Marlowe-Crowne (1964) Social Desirability scale was administered to assess subject suggestibility to social stimuli. A Life-Effects Questionnaire, specifically designed for this study, was administered at the final testing. In addition, subjects volunteered to complete a Self-Report Inventory, in which they described their personal experiences.

Data analysis indicated that on the figure drawings, Gestalt drawings were rated as more spatially balanced ($p < .05$), while rolfing drawings were rated as more structurally balanced ($p < .05$). The Gestalt group rated self-ideal significantly lower on the potency dimension of the semantic differential ($p < .01$). The rolfing group rated body-ideal as significantly softer ($p < .05$). Other body measures were not found to be significant. The Social Desirability scale was not significantly correlated with other research measures. Rolfing and Gestalt subjects rated themselves as significantly changed on the psychological events of the Life-Effects Questionnaire ($p < .001$).

In conjunction with the Self-Report Inventories, these research findings indicate support for the positive effects of participation in holistic modalities such as rolfing and Gestalt therapy. The problems with and the implications of the research are discussed.

"To be aware of our body in terms of the things we know and do is to feel alive. This awareness is an essential part of our existence as sensuous, active persons."

-M. Ploanyi

CHAPTER I

INTRODUCTION

This study is dedicated to the proposition that for each of us, our body can be the best possible habitation; that, in fact, our body may be the best guide available in this journey we call living. This is not the inevitable case. For many persons, the physical body is a source of discomfort; some even experience disgust at the limitations and encumbrances of that physical form. The body (soma) is an ally who can be cultivated to make us aware of need and satisfaction, pain and pleasure. But we must be willing to experience and respond to its rhythms, sensations, and feelings, and on a profound level, to know that we are our bodies.

In this chapter there is a presentation of relevant philosophical thought on the somatic nature of man. This is followed by an exploration of the manner in which psychology has dealt with this issue in terms of body experience and image. The next section considers therapeutic work with the body. The final section lays out the rationale for this study.

Philosophical Considerations

In their endeavor to create change, therapists (healers) and clients across the ages have been steeped in their

immediate zeitgeist, both in orientation and practice. That is to say, what was done as therapy reflected the existing culture's beliefs and attitudes about therapy and life. In earlier times, for instance, a world of demons and spirits gave rise to the rites of exorcism as a preferred mode of therapy, banishment and death being other options. In more recent times, Freud defined the goal of therapy as the ability to work and to love, thus reflecting the dominant Victorian values of productivity and family responsibility.

The body itself is an historical variable from a philosophical standpoint. In the context of this research, the work of Descartes is significant, for in responding to the prevailing Christian values, he initiated a trend which has affected the western world view for centuries. Essentially, Descartes proposed that the ruling principle (soul) is separated from the body and confronts the body as will. The divorce between soul and body takes the life from the body, reducing the organism to a mechanism, dead in itself, but given life and motion by will. The Cartesian dichotomy has profound consequences for the human experience, since it "not only separates mind from body, but severs the experiencing creature from nature, the ego from the world, sensation from motion. It also separates one person from another one, me from you"(May, Angel, & Ellenberger, 1958, pp. 141-142).

As a result of Cartesian dualism, somatic concerns were dispatched to the physician's domain, and mental problems were the priest's or psychotherapist's realm. This operating

premise is inherent in the word psycho-therapist. Thus, a functional (as to treatment) distinction developed between blood-and-guts and thoughts-and-feelings. It can be argued that this very distinction is the root of personal dysfunction.

Other theorists, however, found that such a dualistic approach did a basic injustice to the understanding and treatment of human life. Hanna (1970) explores the emergence and development of "somatic thinking" in his book, Bodies in Revolt. He approaches the human being in terms of living, organic bodies. Hanna considers how existential and phenomenological thinkers have sought to overcome the body-mind distinction in an attempt to establish an holistic awareness that would enable man to come of age, to establish the full consciousness of world and self that is adulthood. For instance, Nietzsche's Uebermensch is that reality of being fully human, a whole, noble and healthy man. Heidegger renames man Dasein: being is here. Thus man not merely exists, but he exists here, in a body and in a space.

The phenomenology of Merleau-Ponty is grounded in this organismic approach. According to Merleau-Ponty, consciousness is perception and perception is consciousness. The mind and body are part of the same function in relating man to his environment: the function of perception. A unique relationship evolves from this perspective, for in the process of experiencing the world, man's body becomes a third term which enters the figure-background structure of experience. It forms a system with the world and becomes an experiential context

which introduces order and meaning into our relationships with other objects. This highly organized sector of space is the only consistent background for one's experience and provides the space in which one can experience identity and a sense of existence (Merleau, 1962).

The Soviet biologist, Oparin (1938), developed a similar conceptualization of this unique mediating space: the human body. Taking a meta-view of biology, Oparin observes that an isolated and bounded region is prerequisite for the organization of life energies. This region creates a definite separation between the spheres of activity within it and outside of it. This implies a different kind of space, and thus a different reality, for each sphere of activity.

The human body is such a bounded region, and as such, possesses unique organizational properties. For the body contains within itself a composite record of all its acts. It represents its potential acts as well. Such potential acts are present within the body boundaries by virtue of the fact that their predetermining structures already exist. The history, and therefore the memory, of the individual is deeply rooted in the biological activity which occurs in his present bodily structure. The logic of this condition allows that a person is what has happened within the bounded space of his body. He is also what this happening makes possible: unique opportunities for future behavior. From this perspective, the body is the source of all feeling related to the past, present, and future of the person.

Marleau (1962) reviews Merleau-Ponty's thoughts on how the body might play this role. As the vehicle of consciousness, the body is necessarily subject. Its spatial character is transformed by this very role, for the parts of the body are not simply "outside of parts," that is, merely objective space. Rather, these parts mutually imply each other because of their integration into a single form. This form, which envelops the individual body parts, is called the body image. The work of Kurt Goldstein and other neurologists fascinated Merleau-Ponty with the body image, this subjective spatiality of the body. A person may see himself as being deep within his body or near its edges. He may project himself into external objects or depersonalize himself. Above all this, there is the implication that a phenomenal body exists, and with it emerges a phenomenal world, a unique self-system. It is at this junction that we more appropriately cross into the psychological domain.

Psychological Theory of the Body and Body Image

Within the psychological schools, there are theorists who have underscored the essential holism of the human experience predicted by their philosophical colleagues. In the diversity of their considerations and investigations, these holistic theorists have kept focus on the premise that the person is a psychobiological entity. For instance, Rollo May (1958) states that man "is and remains a unit. He is not divided into body and psyche; rather, the body is the psyche and the psyche is also the body" (p. 231). Likewise, Lowen

(1975) has stated that:

> the body is the person, the person is his body. We have no real existence apart from our bodies. What goes on in our minds is, basically, a reflection of what goes on in our bodies. (p. 14)

Paul Schilder (1935), a pioneer worker in the psychological study of the human body, considered this reflective body-mind relationship. He developed the concept of body image as a mediating factor which could convert psychological space into physical space and vice-versa. Schilder called the physiological aspects of the body the postural model of the person. Body image is the subjective or inner experience of this postural self-configuration. It emerges as a response to the internal and external realities of the body; it is constantly shifting to provide the ground for coping behavior and a basis for action. "The body image is not a structure, but a structuralization in which continual change takes place" (Schilder, 1935, p. 52).

A brief thought on the nature of the body image may be in order. Body image may or may not be a conscious aspect of the person. Nor is it an immediately tangible feature. The validity of the concept rests on its operational existence. On a popular level, the time, interest, and money expended in developing a "good" body attest to the power of an idealized body image. On a more scientific ground, there have been investigations and speculations into myths, primitive cultures, and art for ramifications of the soma. Psycholinguist Thass-Thienemann postulates that a central body orientation is a sine qua non in the perception and conception of reality.

> The human body and its functions are the primary frame of reference in naming objects of the perceived world. Man speaks a body language even if he refers to objects. (1968, p. 24)

Thus, while it is not directly observable, body image is accorded a meaningful role in human life.

Body image has been defined as the "attitudes, emotions, and personality reactions in relation to one's body" (Traub and Orbach, 1964, p. 53). Another definition stresses the dynamic qualities of body image and its importance in purposeful movement.

> Body image is the memory of experiences we have had with our bodies and the organization of those experiences into a kind of wholeness which gives us information about ourselves as living, moving organisms. Without it we cannot move purposefully . . . . The body image represents: the reality of the body as we know it; all of the sensations that come in to the body; the defined body surfaces; the sense of the vertical and the horizontal; the feeling of body weight; the vision of body shape, size, color; and the sounds the mody makes, all organized into a body wholeness, which is "me." (Hunt, 1968, p. 51).

In all these considerations there is an important asaumption: namely, that a person's organization of his sensations has some effect on subsequent behavior. Schilder (1935) conjectured that body image becomes a primary dimension--conscious or unconscious—in an individual's standards for interpreting and interacting with the world. Allport (1955) extends this line of thought in his notion of set, which he defines as a readiness to respond in certain directions.

> there is behind our perceptions, as we go about our daily affairs, a background state of the body musculature that is more or less relevant to the objects we are about to perceive. This condition

> renders the perception, or for that matter any organized activity toward the object, more rapid and effective. (p. 35)

A set is an expectancy system, involving muscular response and proprioceptive feedback, which becomes self-maintaining "until the internal condition of the organism or the environmental situation changes" (p. 36). These expectancies stem from relationships with primary figures, who communicate to the individual what the problems and dangers of the world are, what can be expected of life, and what the individual is capable of. Thus, in line with Oparin's (1938) conceptualization, the past experiences of the organism mediate future activities.

While body image is normally not in awareness, it can be brought into awareness since the sensations from muscles, tendons, viscera, skin and other sense modalities which compose the self can be explored introspectively. Washburn (1916) proposed that such introspective awareness is of primary importance in the acquisition of new ways of acting. Just how this can happen deserves further exploration.

According to Washburn, all behavior is movement, whether publicly or introspectively observable. Behavior is reflex (unconscious) when there is no higher-center inhibition of a sensory stimulus-motor response. Consciousness from simple awareness to complex thought arises upon inhibition of motor response. Through associative pathways in the central nervous system, the inhibited responses give rise to a centrally excited sensation: an image. Thus man is capable of tenative movement, of imagery and thought. Just as complex movements

are built from simple ones, so the tenative movements of thought and imagery are elaborated according to systems which amount to predispositions to movement. Through repetition and experience these systems converge into an individualized body image.

As to its role in acquiring new behavior, Washburn writes that the body image is useful in suggesting ways for a person to sense a more effective response pattern in living. When an individual is unsure how to act, and the usual reflex is not forthcoming, he is able to engage in an act of self-assessment with regard to the particular task at hand. This is an attempt to construct an appropriate response to an unfamiliar set of circumstances. An image is sought which integrates both the tried and untried selves. This can happen via contemplation, mediation, or even dreaming. The appropriateness of the final behavior will depend largely on the individual's ability to use kinesthetic introspection, which reveals an image of who he is, what he wants, and what he is capable of in the present instance.

What Schilder, Allport, Washburn and others have done is explicate a psychogiological entity, a body image, which unifies and inter-relates the body and mind of man, transforming them into the bodymind which is man. This transformation is at the core of the somatic-based therapies, which are considered in the following section.

The Body in Therapy

The holistic and humanistic schools have given a primary position to the body in the process of growth and thera-

py. There is a strong emphasis on listening to the wisdom of the body, on opening up to the true depths of feeling. It is conceived that personality change is promoted when a person makes contact with a bodily-felt level of experiencing which is implicit (known only by the person) and is able to make explicit at least some part of this experience.

> A body sense of a problem or situation is preverbal and preconceptual. . . not equivalent to any one verbal or conceptual pattern. To attend to it or speak from it is a further living. (Gendlin, 1969, p. 5)

In discussing the new body "psychotherapies," Brown (1973) explicates some of the assumptions underlying these approaches:

1. there exists a spontaneous energy flow of natural energy which embraces the whole organism from its surface to its depths:

2. it is necessary to obtain freedom from severe chronic energy blockages and corresponding emotional and psychological rigidities;

3. the true self is a psychobiological formation, a core region of individualized being;

4. with the differentiation and integration of core regions into a unique person, a unitary and undifferentiated mode of consciousness will emerge, with direct access to all core regions simultaneously.

These somatic therapies recognize that the essence of psychopathological functioning consists in rigidification of behavior and experience. This rigidity is organismically rooted and is psychologically crippling. As holistic theorists, these therapists make no clear dichotomy between mental and bodily events and processes. It is premised that for every rigidity of psychic functioning, there is a corresponding rigidity of

metabolic-organismic functioning. Thus all dysfunction is an arrested fullness of flow of psychological-physiological energies.

The aim of somatic therapies is the eventual loosening, softening, dissolution and elimination of rigidities. This process makes the subjective experience of pain, anxiety, and emotional distress inevitable, if not desirable. For the emotionally defended person is working--largely unaware-- to avoid the pain that direct experiencing entails for him.

Pain plays a significant role in human life and growth. Along with motility, Schilder (1935) considered pain a co-creator of body image. It is considered that part painful experiences may set inhibitory limitations on a person's body image. This occurs when a pattern of pain perception and response, once adaptive for physical and emotional survival, continues to function beyond the period of its usefulness. Because we normally avoid painful situations, there is rarly opportunity or desire to re-experience the painful stimulus. Thus a cycle of limitation is established and physically perpetuated. Such an occurrence has been described as somato-psychic:

> The lasting bodily changes (in structural or chemical composition) which underlie effective adaptation or the collapse of it are aftereffects of stress: they represent tissue-memories which affect our future somatic behavior during similar stressful situations. They can be stored. But such somatic changes can only govern our attitude toward subsequent stressors within our body. The aftermaths of stress which most forcefully guide our future interpersonal relations are emotions . . . which direct social conduct. (Selye, 1956, p. 54)

From a therapeutic standpoint, a painful experience of personal consequence can be recreated in such a way as to allow the person to distinguish between various aspects of the pain involved, e.g., sensory-affective components, past-present dimensions, etc. Such a recreation can modify the undesirable response pattern and attendant self-body concept.

Most forms of psychotherapy attempt to locate traumatic moments of pain in order to release them and allow further growth. But most of these endeavors are verbal. Alperson (1974) notes that all contemporary verbal psychotherapies suffer from fragmentation of a person's total experiencing to various degrees. When a person is distant from his own experiential body process, he is literally cut off from the kinesthetic and sensory input by which he knows his various feelings and reactions toward his self and the world.

Few therapies focus on the physical body as the most direct avenue of evidence, recall,and release. It is the psychomotor theorists, e.g., Reichians, Gestalt, Rolfers, dance and movement therapists, who work with body as the key to personal change and growth.

Purpose of the Study

This study delves into the very heart of the organismic approach to human life: man as a psychobiological unity. Working with somatic therapies, this research proposes to investigate change and growth in the field of human living. The underpinings of therapeutic schools which focus on the body as the locus of development and rehabilitation of the

person have been examined. These schools implicitly concern themselves with the development and modification of the body/self image, which is assumed to provide a basis for one's interactions with the world.

It can be inferred that the extent to which an individual's life is maladaptive and undesirable,his body image is possessed of those same qualities. When a person grows and changes, he is implicitly engaging in the destruction of a maladaptive, limiting body/self concept. Movement and expression—even in painful and unaware areas—can loosen the fixed and rigid boundaries of the self. They can help destroy the ineffective limitations imposed on one's personal motor model.

In the therapeutic process, the person creates an opportunity to experience satisfying and effective contact with his environment. Then the person can place this experience in context and assimilate it into an expanded image of self, posture, gesture, and movement. Awareness of sensation and feeling is extended and heightened. The goal is movement from the fixity of maladaptive patterns to the flexibility of successful interaction with the environment.

Through increasing the store of movement systems latent in his neuromuscular system, the individual can also clarify and develop his body image in a more effective manner. It is proposed that, as a result of somatic-focussed therapy and direct experiencing of one's body process, there is an enhancement of one's body/self experience. This change may be indicated by positive movement on indices sensitive to change

in body/self experience. It is conceived that this data will provide a basis for making statements on the relationship of the body and growth in the total human organism.

In many ways, this study is an excursion into a veritable terra tremens, a land of images, perhaps mirages, given substance by therapeutic and theoretical intuition and occasional traces of empirical evidence. This project represents a fairly systematic attempt to catch some glimmer of the interwoven mind-body-behavior system which calls itself man. Within our phylogeny lie the vegetative and animal energies of aeons, present now, yet altered radically through our evolution into consciousness. We carry within ourselves an image of who we are, an image which serves us faithfully, be it well or not so well. Some believe that a man can change through alteration and awareness of his being on a physical level. This study has proposed to explore whether and whither a person changes as a function of such therapy.

Definition of Terms

Body image: "a term which refers to the body as a psychological experience and focusses on the individual's feelings and attitudes toward his own body. It is concerned with the individual's subjective experiences with his body and the manner in which he has organized these experiences" (Fisher, 1968). The term image does not necessarily imply conscious awareness of such attitudes and feelings.

Experiencing: "the partly unformed stream of feeling that we (as organisms) have every moment . . . the flow of feeling, concretely, to which you can attend every

moment inwardly, if you wish" (Gendlin, 1962, p. 2).

Awareness: Consciousness of the content of the experiencing process.

Organism: The total experiencing, continuously changing human being, continuously interacting with the environment. The total psychobiological human being.

Holism: An approach to human behavior which includes the whole functioning person as well as significant environmental influences in its scope. Man can be fully understood only through recognition that his field is composed of internal and external events.

Structural integration: refers to a treatment process developed by Dr. Ida P. Rolf (1958), which involves physical manipulation of the myofascial tissue and restructuring of the musculo-skeletal system to rebalance antagonistic muscle groups, and to create a more efficient arrangement of the body vis-a-vis gravity. Also known as rolfing and rolf-processing.

Gestalt therapy: refers to a style of therapy originated by Dr. Fritz Perls, which stresses behavioral and phenomenological variables, a "here and now" approach with primary emphasis on realizing full awareness (Perls, 1973).

". . .Everybody assumes consciousness is the exclusive province of the Brain. What a mistake! I (the Brain) have my share of it, to be sure, but hardly enough to claim special privileges. The Knee has consciousness and the Thigh has consciousness. Consciousness is in the Liver, in the Tongue, in the Prick, in you, Thumb. It's coursing through you, too, and you're acting it out. You're each a part of it. In addition, there is consciousness in butterflies and plants and winds and waters. There is no Central Control! It's everywhere."

-Tom Robbins, Even Cowgirls Get the Blues

CHAPTER II

REVIEW OF THE LITERATURE

The review of the literature consists of two sections. In the first, somatic concerns in classical psychology and the somatic theorists are given attention. The second part consists of the experimental literature related to the body and to somatic therapy.

Classical and Somatic Psychological Theory

The early psychologists were very much involved with the body by virtue of their psychophysiological interests and the method of introspection that flowed from their studies. The work of Wundt, Titchener and their colleagues gave credance to the notion that body experiences and the perception of one's body are significant psychological dimensions in the total perceptual process. Their findings suggest that an individual's pattern of body sensations is involved in perceptual meaning, and hence subsequent behavior.

Freud also placed great emphasis on the body, as can be seen in his work, The Ego and the Id (1927):

> The ego is first and foremost a body-ego. That is, the ego is ultimately derived from body sensations, chiefly those springling from the surface of the body. It may thus be regarded as a mental projection of the surface of the body. (p.31)

The literature of the psychoanalytic school considers the body image as essential in the development of the ego structure. It is only as the individual progresses through various phases of body dominance (oral, anal, phallic) that he eventually arrives at the genital stage of maturity. If, indeed, the person has become fixated at any earlier stage of development, he will deal with adult experiences in terms of a body context more suited to that earlier stage. The fixation determines the specific pattern of body-image distortions which occurred, e.g., excessive orality.

In establishing a theory of infantile sexuality, Erikson (1950) makes some compelling observations on the relationship of the human infant and his body. Early human development is simply a relationship between body zones and various modes of being in these zones, e.g., retention, elimination, intrusion, etc. Erikson notes:

> A being with organs can take things or another being into himself; it can retain them or let them out; it can enter them. . . . The human child during its long childhood learns these modes of physical approach and with them the modalities of social life. He learns to exist in space and time as he learns to be an organism in the space-time of his culture. (p. 91)

This training provided by the culture:

> forever ties the individual to the traditions and to the institutions of his childhood milieu, and exposes him to the—not always logical and just—autocracy of his inner governor, his conscience. (p. 92)

Thus Erikson is proposing that an individual is socialized and acculturated through the basics of his bodily processes.

Adler (1924) felt that personality problems arose from constitutional factors, neurosis being a reaction to real or imagined organ inferiority. The organ in quesiton takes on exaggerated importance relative to the rest of the body and exerts a distorting effect on the individual's behavior.

Constitutional theorists have also postulated a relationship between body structure and personality. The most prolific author of this school is undoubtedly Sheldon, who classified persons into three basic somatotypes, each with its characteristic personality type. High correlations were reported between morphology ratings and temperament.

As noted in the first chapter, some contemporary personality theorists and therapists have enunciated the essential unity of man's mind and body. When mind and body are considered separately, they are simply theoretical constructs. In living reality, they are mutual concepts which exist in a synergistic relationship with each other. Thus it is possible to understand how a life-historical event can bring about a change in physiological events, and conversely, how a physiological event can effect life-historical events. These somatic theorists share a common belief in the value of nonverbal physical treatment and its functional role in the psychotherapeutic process.

A pioneer in the field of somatic therapy, Wilhelm Reich somaticized Freud's original insights into the body/

mind relationship. According to Reich, when a human is unhealthy, this is due to a blockage or deviation of energy patterns from their normal flow into the environment. A person who is consonant with his current behavior shows this in unimpeded, fluid action. Clumsy, graceless action represents a compromise between an impulse and its inhibition. Reich (1949) describes this latter state as:

> a substitute for something else, it serves a defense purpose, it absorbs energy, and it is an attempt to harmonize conflicting forces. . . . The result of the achievement is all out of proportion to the energy expended—and the individual's satisfaction is diminished. (p. 151)

Reich's unique contribution is the localization of personality conflicts in the individual's muscle tone. For human beings repress and protect themselves by muscular contraction. If this contraction becomes habitual, it passes into control of the autonomic nervous system. The person, now unconscious of this condition, is successfully character armored. This armor in turn affects the individual's experience of his body. Reich believed that most persons in this culture were armored, but that it was the degree of rigidity which distinguished normals from disturbed. His works describe the clinical occurrence of this armoring phenomenon.

Moshe Feldenkrais (1949), an influential somatic therapist, states that the body is not merely the expression of personality, but the physical body actually is the personality. Dynamic posture is therefore an index of the person's total functioning. According to Feldenkrais, neurosis is the reinstatement of unwanted patterns beyond conscious control. His

book, Body and Mature Behavior, relates patterns of anxiety to chronic physical states. For example, fear of falling is expressed in all types of negative emotion. It is seen in a generally lessened tone of the dorsal extensors with compensatory hypertonicity of the flexors. Feldenkrais works on developing the individual's kinesthetic sense, which results in progressive changes in body and personality.

Gestalt therapy, the work of Fritz Perls, is founded on two basic principles: absolute working in the here and now; and full concern with the phenomenon of awareness (Perls, Hefferline, and Goodman, 1965). The therapy is based on perceptual-motor theory, clearly reflected in Perl's dictum: lose your mind and come to your senses. This essential Gestalt tool focuses awareness on the external senses and the internal proprioceptive system as a means of facilitating human growth. Perls saw the neurotic as engaged in a civil war between his motor system and unaccepted organismic energies seeking expression. Like Reich's armored person, the rigid neurotic person immobilizes his motor and sensory systems and thus dwells in a numb, awkward body.

In Ego, Hunger and Aggression (1969), Perls notes the differential body awareness that people have. Polster (1973), a Gestalt therapist, elaborates on this phenomenon:

> People play favorites with their bodies. The awareness of sensation in some parts or functions of their bodies is restricted or placed off limits and remains outside of their sense of themselves. Thus they remain out of contact with important parts of themselves. (p.79)

The normal, healthy, self-supporting person engages in a continuing process of gestalt formation and destruction, a process of emerging organismic need and successful interaction with the environment. In doing this, each person develops a unique pattern of sensory-motor-affective (non-verbal) behaviors. When a person blocks his organismic energy, this is manifested by some incongruity between his ongoing behavior and the sensory-motor-affective background. The Gestalt therapist focusses client awareness on bodily tension and incongruities, for these nonverbal behaviors indicate a corresponding psychic tension, a rigidity of awareness. Before he can behave in new ways, the individual must first become aware of his present sensations and feelings, his present self-imposed limitations. This is the paradoxical theory of change proposed by Gestalt therapy. Through awareness of sensory, nonverbal, somatic cues, the Gestalt therapist facilitates the person's integrated functioning. This is accomplished directly by exercises in guided awareness. However, sensory awareness is a pervasive technique used in the dream work and psychic dialogs, which are the hallmark of Gestalt therapy. A concise but thorough review of the practice and techniques of Gestalt therapy is provided by Yontef (1971), who underscores the holism and multidimensionality of the Gestalt approach.

Another of the somatic therapies is a product of the work of Dr. Ida Rolf (1958) and is called structural integration or, more commonly, rolfing. Rolf's basic premise is that posture is behavior. The body is organized in space and subject to

gravity. The body can be visualized as a stack of major blocks representing the head, thorax, pelvis, etc., which must be in proper balance and distribution for movement with minimum stress. As a result of physical and emotional trauma, muscles become displaced with compensatory disarrangement of other muscles. Through the shortening, thickening and invasion of connective tissue (fascia), these muscular changes become chronic and involuntary, and there ensues a blockage of both free physical movement and emotional expression, since physical limitations have emotional consequences.

Dr. Rolf believes that the body can be restructured in ten hours of carefully programmed work, which will result in significant improvement in vital functions, balance and emotional well-being. Her theory is heavily influenced by Feldenkrais, who proposed that deviant activity of the muscular system is an individual's outward expression of his predominant emotional set. Her work also reflects Selye's (1956) proposal that habitual responses in the muscular sets can be changed by exposing the body to a stress for a realignment of balancing forces, which will in turn stimulate adaptive energy.

In Structural Integration, the person being processed must "be willing to release old muscle patterns and accept new muscle patterns. . . and organize them in terms of balance" (Rolf, 1972). This new balance is accomplished by altering the length and tone of the myofascial tissue, through a series of deep body manipulations. Fingers, knuckles, hands

and elbows are applied to the myofascial tissue, sometimes producing extreme pain. The first seven sessions of work are devoted to freeing the chronically stressed areas of the body. In the last three sessions, effort goes into repatterning of the major fascial planes, balancing the body from foot to head, and moving broad areas of the body into equilibrium. The result is an integrated, balanced form, structured to function effectively (Hammann, 1972).

Experimental Literature

To this point, it is clear that a number of philosophers, psychological theorists and therapists agree that body characteristics are tied to personality and behavior. The terms "body structure," "body posture," "body cathexis," "body schema," and "body concept" have appeared in the literature, reflecting the wide range of interest in and the complexity of the phenomenon. Actual empirical work directly focussed on the body-person relationship is limited.

Jourard and Secord (1954) found a positive correlation between size of body parts and body-cathexis for those parts in both male and female subjects. For females there was also a positive relationship between body-cathexis and actual-ideal discrepancies in size of body parts. In a separate study, Secord and Jourard (1973) obtained a significant correlation between body- and self-cathexis. These findings support the inter-relationship of body and self.

Rosen and Ross (1968) used students' responses to an adjective checklist to measure satisfaction with physical

appearance and self-concept. Their findings show a moderate correlation, r = .58. Zion (1965) measured 200 college females self-acceptance, ideal self and self-description and correlated these with measurements of body description, body acceptance and body ideal. A significant linear relationship was found between self and body description and ideal self and body. Kurtz and Hirt (1970) investigated the relationship between physical health and global attitudes to the form and appearance of the human body. They developed a body attitude scale using the semantic differential and computed a composite score of a person's feelings toward his body. Results indicated that all subjects rated their bodies significantly more negative than healthy persons on all three dimensions of the semantic differential.

There are some studies of the relationship of posture and personality. Deutsch (1947) reported on case studies of 17 patients undergoing psychoanalysis. He observed that posture was expressive of motivation, attitude and reactions. He also noted shifts in the basic posture at rest. Reiter (1973) found a significant increase in self-concept as measured by the Tennessee Self-Concept Scale in an experimental group participating in a postural training program. In particular, increases in the physical self, identity, and self-satisfaction scales were noted.

Seymour Fisher (1970) is the most prolific and authoritative researcher in the area of the human body and body image. In his work, he has developed a barrier scoring of

projective inkblots. This scoring taps into basic concepts and feelings about one's body. His studies indicate that such an index is independent of the consciously verbalized self-concept and the actual structural characteristics of the body.

He has found that

> with increasing boundary definiteness a person can more clearly see himself as an individual possessing differentiated identity and can act in a more autonomous, self-steering fashion. (1970, p. 305)

The body boundary is positively correlated with clarity of identity, efficient coping with stress situations, and being communicative in small group situations. He has also been able to differentiate psychosomatic symptoms and patterns of autonomic reactivity as a function of boundary factors. It has also been demonstrated that changes in body states in both normal and disturbed populations are accurately reflected in the barrier scores. His data indicate that with increasing severity of emotional illness, body image and boundaries become progressively looser, which is reflected in the penetration dimension.

In a study of 25 anxiety neurotics, a shift in body image was shown to accompany a change in ego-integrity as a function of long-term psychotherapy. Therapist evaluation served as the measure of progress in therapy, and barrier scores measured body image. Fisher and Cleveland (1968) concluded that most patients rated as improved showed a shift toward more defined body image boundaries. While there are

uncontrolled aspects in this study, the results suggest a relationship between one's sense of self and body image, and that this relationship is involved in the therapeutic process.

A study by Fisher and Fisher (1964) demonstrates the relationship of boundary to actual body experiences. In two groups (N=79, N=20) subjects were asked to report the number of interior and exterior sensations linked to recall of emotional states (e.g., "when you are angry"). Individuals with definite boundaries significantly more often recalled "past emotional states as involving a high proportion of exterior than interior body sensations" (p.262). These findings strongly support the relationship of body image/boundary to actual body experiences and patterns of emotional response.

There is a relative abundance of literature on rolfing, a majority of which focusses on the physiological effects of the process. Rolf (1962) made a series of lab tests on 30 subjects in order to determine the depth of metabolic change which accompanies structural integration. Samples of blood were analyzed for blood cholesterol, blood enzymes, redox potential, protein-bound iodine, and various proteins, including albumin-globulin ratio. The analysis showed a lasting shift in the homeostatic equilibrium of the subjects. Measurements of the condition of peripheral circulation, pulse rate, systolic and diastolic blood pressure and heart rhythms also showed consistent changes which

were deemed appropriate for healthy human functioning.

Hunt (1972) performed a tenative study of the electromyograms of subjects before and after rolfing. Using a telemetry pack that sends signals from electrodes attached to the shoulder,neck, back, and hip, she measured the duration and amplitude of neural activity involved in simple movements such as walking, lifting, sitting, and throwing. Results showed that postrolfing these acts were performed with a shorter period of muscle contraction; in addition, the amplitude of energy expenditure is higher during activity and lower during passivity. She suggests that after rolfing there is less neuro-muscular static, less random tension and more efficient patterns of energy use. This corresponds to her observational data, which show that after rolfing:

1. movements were smoother, larger, less constrained;
2. there were fewer extraneous movements;
3. spatial movements were more dynamic or energetic;
4. posture was improved with more erect carriage and less obvious strain to maintain held positions.

Silverman (1973) did psychophysiological research on 13 normal males who underwent structural integration. Their results show significant differences in pre/post EEG averaged evoked response measures. These differences indicate an increased sensitivity and receptivity to environmental stimulation, which is characteristic of increased AER amplitudes. There was also increased stability of the evoked response, which indicates a significant increase in organi-

zation of the sensory information-processing system. Silverman concluded that the response pattern of rolfed individuals to low and high intensity stimulation is considered to be an adaptive one, indicating both a sensitivity to stimulation and a capacity to efficiently modulate strong stimulation. Suggestive personality data were gathered, using the Welsh Anxiety Scale, which indicated a decrease in anxiety after rolfing. These researchers concluded that their findings support the value of structural integration, particularly in demonstrating the integral relationship between the human organism's sensory and muscular systems.

Gibbs (1973) found that structural integration processing "biases the neuromotor organization for increasing the degree of relaxation in the antagonistic muscle during slow isotonic movements" (p. 31). Leonard (1972) analyzed the voice spectrograms of six rolfees for pre and post changes in voice production. His findings indicate that such changes did occur and were detectable by a group of judges.

Research dealing with psychological effects of rolfing has been limited to case studies for the most part, all of which report improved emotional well-being. However, there have been a few experimental studies. Using the Tennessee Self-Concept Scale, Lieber (1974) found a positive relationship between self-esteem and postural alignment. Man (1973) investigated changes in art among rolfing, Gestalt, encounter and control groups. She used the Draw-A-Person and Draw-A-

Scene tests. Her criteria were space, subject matter, level of integration, line and form, movement, texture, and balance. She was able to distinguish treatment from control groups. Rolfed subjects were least changeable in their drawings, which was interpreted as showing increased consistency and integration. However, Man has expressed dissatisfaction with the criteria employed in her study (personal communication, 1976).

Wandler (1972) related three case studies of children who were diagnosed autistic. Her impressions indicate that after rolfing, the children were greatly improved, and, while not normal, they showed significant maturational progress.

The most extensive research to data is that of Davis (1969), who assessed changes in nine individuals who were rolfed. Measurements used were

1. physical measurements of body parts;
2. postural photographs;
3. horizontal awareness (spatial symmetry);
4. vertical awareness;
5. the structured-objective Rorschach test (form interpretation);
6. Draw-A-Person test;
7. Body Cathexis Questionnaire;
8. Secord Homonym Test of Bodily Concern.

She concluded that for the group she tested, structural integration produced measurable changes in the physical structure, behavior and subjective self-perception. Specific findings were a decrease in anxiety and impulsiveness and an increase in conformity and persistence, as measured on the Rorschach. The Body Cathexis Questionnaire and the Homonym Test indicated all subjects had more positive feelings toward their bodies. All subjects were changed on physical dimensions. Davis also gathered data from interviews and self-reports. A wide variety of effects were reported: emotional release based on recall of early experiences; changes in awareness of bodily self; evolution of a more adequate body image; physiological changes including improved digestion, vision, and breathing; more conscious control of muscle groups; and increased optimism.

Carrera (1974) set out to determine if there was an observable difference between rolfed and unrolfed bodies in the performance of simple movements. Videotaped movements of 24 rolfed and 24 unrolfed persons were judged by a panel of rolfers and college sophomores who heard a lecture on rolfing. The two panels were unable to discriminate between the rolfed and unrolfed persons.

The general finding on the effects of structural integration suggeststhat there are positive changes on physiological and psychological levels. The rolfing technique provides a promising laboratory for investigation of attitude, awareness and feeling toward one's body in the process of change.

Basic research in the area of Gestalt therapy is sparse. As Yontef (1971) notes, Perls offered no quantified, statistical evidence that Gestalt therapy works. He did, however, have some crusty thoughts on this topic:

> "Where is your proof?" Our standard answer will be that we present nothing that you cannot verify for yourself in terms of your own behavior but if your psychological make-up is that of the experimentalist as we have portrayed him, this will not satisfy you and you will clamor for "objective evidence" of a verbal sort, prior to trying out a single nonverbal step of procedure. (Perls et al., 1965, p. 7)

Perhaps under this aegis, subsequent Gestalt practitioners have shown little research interest. Gestalt therapy is an empirical theory, however, inasmuch as it works with immediate observation and experience. Unlike their Rogerian neighbors, Gestaltists have chosen to neglect the operationalization of their work. The focus of Gestalt literature has been the case study, the most detailed of which are by Laura Perls (1961). The printed and video literature abounds in dramatic instances of individuals breaking through emotional impasses and reaching new levels of personal awareness and energy that allow them to develop a mature relationship with themselves in their world. There are reports of successful Gestalt work with normals, neurotics, psychotics, delinquents, and other personal styles (Fagan and Shepard, 1970; Kempler, 1966, 1967; Perls, 1973). Objective and statistical data remain a twinkling in someone's eye.

Overall, the Gestalt approach has found substantial support and great enthusiasm among contemporary psychotherapists and their clients. Since it has become a widespread

clinical approach, Gestalt therapy is ripe for systematic empirical investigation.

This review of the literature has covered a wide range of theory and experiment/experience. From this has emerged a constant assertion and selected affirmation that the person is his body, that there is no real divorce of the two, and that the price of attempted divorce is neurosis, psychosis, or less than full-functioning of the person. It is also asserted that the psychobiological sense of self can be enhanced to promote being fully alive and that there are therapies which work to this end.

"Methinks there is madness in this method!"

- Anonymous

CHAPTER III

RESEARCH DESIGN AND METHODOLOGY

Plan of Study

This study has investigated change and development of self and body experience in two groups of people: One undergoing rolfing and the other Gestalt therapy. A third nontreatment group served as control. Because rolfing and Gestalt are somatic and experiential therapies, it might be expected that individuals involved in these endeavors would come to experience their bodies/themselves in a different, more positive light. In theory, the change from somatic unawareness into awareness is an essential ingredient of both therapies. There are no differential hypotheses for the two treatment groups. Rather, it is recognized that both treatments share the same goals and perspectives on human functioning and well-being.

This is a descriptive and exploratory study, unique in its own right. It is also a clinical study, attempting to capture some of the variables experiential therapists intuitively use, but to focus on them in a more systematic manner. For purposes of this research, the subjective effects and measures of treatment, while more elusive, are considered as important as more objective ones. Thus projective

and introspective data constitute admissible evidence. The research reported previously has suggested the general criteria for formulating and measuring change.

Description of Subjects

Fourteen rolfing subjects (7 male, 7 female) for the study were selected from persons in the Gainesville, Florida, area who chose to undergo the standard series of structural integration processing at the hands of Rick Sword, Ph.D., a qualified and certified practitioner of structural integration. Individuals signed an agreement to be tested before and after they were rolfed, to complete rolfing within 15 weeks, and to refrain from participating in any new major self-development activities until after their participation in the project was completed. For their participation in the study, these persons were given a $100 discount on the standard rolfing fee of $400.

Subjects for the Gestalt therapy group were participants in a Gestalt therapy training class conducted in the Human Services Training Program at Santa Fe Junior College. Because the class size was limited, and the Human Services program is predominantly female in composition, there were 10 members in this group: 7 females, 3 males. Dr. Pat Kerb, Ph.D., an experienced Gestalt therapist, led the training for one quarter in spring, 1976. These persons had just begun training in the Human Services program and were psychologically naive. They agreed to refrain from other major self-development during the course of the study. Their full participation in the study

was credited as a class project by the instructor. This served as an equivalent incentive to the discounted fee given the rolfing group. The class met for 10 two-and-one-half hour sessions over the course of the quarter.

While there is no way to demonstrate the equivalence of physical manipulation of rolfing with the 10 collective psychological/awareness experiences of the Gestalt therapy group, there is some reasonable basis for assuming that each individual who participated in a treatment condition had an opportunity to obtain the benefits of that particular therapeutic modality. Persons in the rolfing group clearly received 10 individual sessions. Typically and in this case, Gestalt experience consists of group exercises designed to facilitate awareness and individual work in which each member of the group plays silent participant/observer in the public work which is taking place. At the conclusion of group exercises and individual work, each member shares his/her own experience of what has occurred. This, in turn, may serve as the basis for new work and awareness in the group. The focus remains on personal awareness, thus maximizing each person's learning and growth in a group context.

Control subjects (7 male, 7 female) were selected from a group of persons interested in being rolfed or participating in a Gestalt group, but for whom time, money, or other considerations made this impossible. They also signed an agreement to refrain from new programs of self-development during the study. The control Ss received a discount fee of $40 on rolfing, should they elect to be rolfed at some point.

All participants were offered an opportunity for feedback at the conclusion of the study. Basic demographic data is presented in Table 1. Subsequent information gathering indicates that every subject had participated in growth experiences prior to the time of the study. The range of these activities included mediation, counseling, various disciplines such as tai chi and yoga, and the use of drugs. While these activities are not among the general population, they were a regular feature of the groups in this study. Thus, it is clear that the population encountered in this study is a select one, albeit homogeneous in itself: namely, individuals interested in personal growth and exploration.

Instrumentation

All subjects were administered a battery of psychological tests designed to measure body/self perceptions. A description of these measures follows.

A. Barrier/penetration Scoring

Fisher's (1970) use of the inkblot stimulus to tap into body-image is well suited to the purposes of this study. Although projective techniques are vulnerable on many fronts, the barrier/penetration scoring does appear to be a fairly reliable research instrument. Research indicates that interscorer reliability of the system has been consistently high, with rho correlations of .82 - .97 (Megargee, 1965; Ramer, 1961). Test-retest reliability for this measure has generally yielded coefficients from .78 - .89 (McConnell and Datson, 1961).

TABLE I

Subject Information

Group	Rolfing	Gestalt	Control
Sex			
Male	7	3	7
Female	7	7	7
Total N	14	10	14
Mean Age			
Male	35.0	25.0	24.2
Female	25.4	29.9	22.4
Total	30.2	27.5	23.3

Twenty-five cards from Form A of the Holtzman inkblots were used in the pretest, and an equal number from Form B were used for the posttest. The two forms are equivalent and offer the advantage of minimizing test-retest effects found in using the same instrument. Fisher (1970) indicates that 25 responses are an optimum number for obtaining a barrier/penetration scoring. Protocols were gathered from all subjects, coded, and scored according to standardized categories.

B. Body Chart

As Osgood, Succi, and Tennenbaum (1961) point up, the semantic differential is readily applicable to therapy research. Much of what occurs in therapy occurs at the level of meaning, so that persons, events, situations and their inter-relationships come to have different meanings. The changes that take place during therapy should be reflected by changes in the meanings of relevant concepts, which should in turn be reflected in judgements on the semantic differential. Studies by the authors cited above indicate that the semantic differential is a sensitive and helpful tool in studies of attitude change and personality research.

The means of arriving at results, i.e., collection of marks on bipolar scales to the location of concept points in semantic space, is objective. The data of semantic measurement are essentially subjective, i.e., introspections about meanings on the part of subjects. However, the expression of these subjective states is objectified through the semantic

differential procedures. Osgood et al. report extensively on the reliability and validity of the semantic differential (op. cit., pp. 126-166). Kerlinger (1973) notes that the semantic differential factor scores are psychometrically sound and substantially interpretable.

Six pairs of polar adjectives were selected, two for each factor of the semantic differential: evaluative, activity, potency. Adjective pairs were picked for factor representativeness and relevance to the concepts being rated. Factor loadings are reported in Table II. As to the relevance issue, Osgood et al. states that "the particular scales are variable and must be carefully selected by the experimenter to suit his purposes" (p. 90). This study utilized form II of the semantic differential. This form was chosen because authors indicated that it provides greater constancy of meaning in the item being judged and is more satisfying to the persons filling out the form. The order of the polar adjectives was reversed to counteract response-bias tendencies; that is, a subject could not go down the list and check all the scales at the same point.

The body was segmented into 21 areas to obtain a discrete picture of each person's somatic awareness and attitudes. These 21 segments reflect major muscle and movement sectors. They are listed in Appendix A. Subjects were instructed to attend to each body segment as it was brought to their awareness by the experimenter and then to rate themselves on a seven-point scale for each adjective pair. Ste-

TABLE II

Semantic Differential Factor Loadings
for Body Chart

Dimension	Adjective Pair	Loading
Evaluative	healthy-sick	.98
	graceful-awkward	.38
Activity	active-passive	.98
	hot-cold	.26
Potency	hard-soft	.97
	strong-weak	.40

vens (1971) employs a similar technique in his Gestalt workbook. At the time of the first testing, subjects were asked to indicate six body segments that were problematic, i.e., painful, unaware, self-conscious, etc., for them. It was expected that these areas would receive attention in treatment and perhaps reflect shifts in bodily experience.

The inspiration for this measure is derived from Polster and Polster (1973), Schutz (1971), and my own therapeutic work. In discussing the issue of personal awareness from a somatic viewpoint, Schutz suggests it is possible to make an awareness map of each person's body, for certain parts of the body are very much a part of the person, and other parts are literally disowned or alienated. Sensation, texture, and temperature all provide indices of the degree to which an individual has integrated his somatic self into his total being. This approach underscores the intimate relationship between psyche and soma. The awareness map is related to personal integration.

> Dead spots physically indicate a lack of integration of the individual into a whole person. . . . Any time a psychological area is difficult for a person to assimilate, be it sex, aggression, love, anger, intellect, tears, or whatever, there is a corresponding body part in the same condition. (Schutz, 1971, p. 29)

The number of body areas selected for statistical analysis was limited to six. These six areas were selected by a simple frequency count of the problem areas which subjects had listed. The areas listed most frequently were: shoulders, back, neck, face, chest, and abdomen. Table III

reports the distribution of this listing. The ratings of these areas were then processed in the statistical procedure.

For purposes of data reduction, Subjects' ratings of adjective pairs were summed pre and post for each factor. The hard-soft pair from the potency dimension were handled separately inasmuch as there was reason to believe that, while potency ratings in other adjective pairs might increase, the ratings on the quality hard-soft would decrease after treatment. If the scores for all pairs were averaged into one factor score, this phenomenon would be lost. For this reason, there was separate analysis of polar adjectives from the potency dimension.

C. Self/Body Concept

The literature reviewed in the previous chapter indicates that, by virtue of participation in rolfing and Gestalt therapy, persons generally feel better about themselves. To obtain an overall picture of the individual self-concepts on a physical and psychological plane, subjects were asked to rate their psychological selves and their bodies on nine adjective pairs, three for each factor of the semantic differential. Table IV reports the factor loadings of the adjective pairs. A further dimension was added by distinguishing between actual and ideal self-perceptions. Actual self is a description of one's current psychological/physical reality. Ideal self is the person/body one would like to be. Ratings of adjective pairs were summed to obtain semantic differential factor scores. Reflecting the considerations voiced in the Body Chart section, the hard-soft pair of

TABLE III

Frequency Distribution of Body Problem Areas

Area	Number of Ss Responding (N = 38)	Per Cent of Total Responses
Shoulders	35	15
Back	32	14
Neck	31	14
Face	29	13
Chest	24	11
Abdomen	21	9
All other areas (15)	56	25
Total	228	

TABLE IV

Semantic Differential Factor Loadings
for Self/Body Concept

Dimension	Adjective Pair	Loading
Evaluative	graceful-awkward	.38
	Optimistic-pessimistic	.49
	good-bad	1.00
Activity	active-passive	.98
	excitable-calm	.26
	fast-slow	.26
Potency	strong-weak	.40
	heavy-light	.48
	hard-soft	.97

the potency dimension was segregated from the potency dimension score.

D. Draw-A-Person Test

Machover (1949) hypothesized that an individual's spontaneous drawing of the human figure represents a projection of his own body image in many ways. At a very basic level, drawing is a cognitive process grounded in the body structure. However, most of the work done with figure drawing has centered around diagnostic concerns. Swenson (1968) reviews the fragility of such clinical endeavors. This factor has cast the DAP into disrepute in many circles. But Fisher and Cleveland (1968) observe, "figure drawing may be a potentially valuable method for studying body image" (p. 68). Thus it came about that subjects were presented with a plain 8½ x 11 sheet of paper and asked to draw a full representation of a human being. No further suggestions were offered. Subjects who had art instruction were asked to indicate this on their drawings in order to account for the training factor in their representations.

In assessing the drawings, this study followed the criteria successfully employed by Davis (1969) and Man (1973). These are

1. Expressive gesture (body animation, including facial expression) expressive-nonexpressive;
2. amount of detail (in body parts, clothing, etc.): detailed-plain;
3. postural attitude (feeling conveyed by posture in the drawing): open-closed;
4. spatial balance (arrangement of drawing on paper): balanced-unbalanced;

5. structural balance (proportion and balance within the figure): balanced-unbalanced;

6. evaluative impression (rater impressions of body/self image reflected in drawing): positive-negative.

In addition, subjects were presented with both their drawings at the conclusion of testing and were asked to rate their own drawings on one criterion:

7. satisfaction with own drawing: satisfied - dissatisfied.

Three raters, all graduate students in the behavioral sciences and with no previous DAP experience, were selected and trained to evaluate the drawings. A seven-point scale was employed for each adjective pair. Initially, the raters discussed the criteria for the DAP ratings. They were then familiarized with the rating scale. Sample drawings which reflected the various criteria were then rated. These sample drawings were scored for inter-rater reliability. The raters were given feedback and further discussed the criteria. A second set of sample data was rated independently by the raters, and reliability was established. Guilford's (1965) two-way ANOVA was used to establish inter-rater reliability, with pre and post data from each rater being treated as if he were data from different subjects. When inter-rater reliability was established at .70 for all criteria, training was discontinued. Drawings from the study were randomized and presented to the raters. Table V reports the complete inter-rater reliability for the DAP data. During the training period, the reliability ranged from .68 - .85; at the close of training the range was .74 - .89; for the

TABLE V

Inter-rater Reliability for
DAP Data

Dimension	Practice Scores	Reliability scores to establish criterion	Scores obtained on actual research data
Expression	.70	.76	.79
Amount of detail	.81	.85	.86
Openness	.77	.81	.82
Balance I (on page)	.85	.89	.93
Balance II (within figure)	.87	.88	.92
Positive	.68	.74	.77

study data the range was .77 - .93.

E. Life Effects Questionnaire

In order to assess the broad effects of treatment, a Life Effects Questionnaire (LEQ) was created for this study (Appendix A). The LEQ consists of two parts: Behavioral Events (LEQ I) and Psychological Sense (LEQ II). The first section was patterned after a method of observing gross human behavior developed by Pascal and Jenkins (1961) and consists of 23 items. The second section was developed from an informal listing of psychological experiences often reported to accompany person growth (Maslow, 1962; Perls et al., 1965; Rogers, 1961; Rolf, 1958) and consists of eight items. Subjects were given the questionnaire at the final testing session and were asked to rate themselves as having experience positive (3), negative (1), or no change (2) on each LEQ item.

F. Self-report Inventory

In recognition of the possibility that measurements and tests might allow valued personal experiences to go unreported, each subject was asked to complete an experience (Appendix A). This type of report allowed the individual to reflect on events which provided personal learning and insight, particularly that associated with the treatment process. In addition, each person was asked to list any growth experiences engaged in prior to the time of the study. Individual discretion determined the length and detail of the report. The experience log forms were sent by mail after the final testing session. No hypotheses were formulated for this

informal data. Rather it was allowed to stand simply as being of narrative interest (Appendix B).

G. Marlowe-Crowne Social Desirability Scale

The Marlowe-Crowne Social Desirability Scale is an indirect measure of the need for approval. It is widely used as a measure of defensiveness. High scores are viewed as indicative of attempts to avoid social disapproval and failure by individuals who are defensive. As the authors point out:

> for those whose need is higher, we could assume a generalized expectancy that approval satisfactions are attained by engaging in behaviors which are culturally sanctioned and approved and by avoiding those responses which are not. (Marlowe and Crowne, 1964, p. 27).

Internal consistency coefficient for the scale is reported at .88. Test-retest correlation of .88 was also obtained. There is a positive correlation between the SD scale and the K and L validity scales of the MMPI.

It was anticipated that this scale would indicate whether individuals were responding to factors other than their immediate personal experience, e.g., therapist persuasion, social desirability, cognitive dissonance, suggestibility, etc. This factor was treated as a "nuisance" variable in this study. That is, it was something to be aware of in considering the data but not an intergral part of the research. The scale was administered at the time of the first testing.

Hypotheses

It was hypothesized generally that as a result of perticipating in holistic, self-enhancing treatments such as rolfing and Gestalt therapy, subjects would have a more posi-

tive experience of themselves after treatment. It was further assumed that these positive experiences would be reflected in changes on the measures employed in the study. It was hypothesized that these measured changes would be significantly different from the measured experience of a nontreatment group. The hypotheses stated here are exploratory in nature and are being tested against the null hypothesis. They are drawn from the general and experimental literature previously cited.

A. Research by Fisher (1970) has demonstrated that the barrier/penetration score is a useful tool for assessing feelings about one's body and sense of self. The barrier score is reported to increase with a more positive experience of the self. Thus it is hypothesized there will be an increase in barrier scores for the rolfing and Gestalt groups. Likewise, the ancillary penetration score reflects the individual's feeling that the body exterior is not protective inasmuch as it is penetrable by external forces and objects. Thus, a lower penetration score is postulated for the treatment groups.

Hypothesis I: There will be a significant difference in the means of barrier scores for the treatment and control groups.

Hypothesis II: There will be a significant difference in the means of penetration scores for the treatment and control groups.

B. It has been asserted that personal awareness of body areas is a function of acceptance and integration of

these areas into the total organism. Holistic approaches such as rolfing and Gestalt therapy might reasonably be expected to produce a more integrated and positive bodily sense. Therefore, it is hypothesized that semantic differential ratings of problematic body areas will show positive movement for the rolfing and Gestalt groups.

Hypothesis I: There will be a significant difference in the means of body rating scores for the treatment and control groups as measured by the following semantic differential factors:

1. evaluative;
2. activity;
3. potency;
4. hard-soft.

This will apply to six body areas rated as problematic.

C. It has generally been reported that persons have a more positive sense of themselves after they participate in rolfing and Gestalt experiences. Thus it might be expected that semantic differential ratings of psychological and physical self along actual and ideal dimensions will be more positive for the treatment groups.

Hypothesis I: There will be a significant difference in the means of the treatment and control groups for actual/ideal psychological self as measured by the semantic differential:

Hypothesis II: There will be a significant difference in the means of the treatment and control groups for actual/ideal bodily self as measured by the semantic differential:

1. evaluative;
2. activity;
3. potency
4. hard-soft.

D. Human figure drawing may represent a projection of the artist's own feelings toward body and self. As a person comes to view himself more positively, his drawing might be expected to reflect this shift. Thus it is hypothesized that human figure drawings or by rolfing and Gestalt subjects will be assessed as more positive following treatment.

Hypothesis I: There will be significant differences in the means of human figure drawing ratings for the treatment and control groups along the following dimensions:

1. expressive gesture;
2. amount of detail;
3. postural attitude;
4. spatial balance;
5. structural balance;
6. evaluative impression;
7. subject satisfaction with drawing.

E. There are implications that rolfing and Gestalt experiences have positive effects on the overall life conditions. Thus it seems reasonable to have persons assess a wide range of life activities and experiences following their treatment. It is hypothesized that rolfing and Gestalt subjects will rate themselves as having changed in a positive direction following treatment and that this change

will be significantly more positive for the treatment groups.

Hypothesis I: There will be a significant difference in the mean of positive change scores of the treatment and control groups for LEQ I: Behavioral Events.

Hypothesis II: There will be a significant difference in the mean of positive change scores of the treatment and control groups for LEQ II: Psychological Sense.

F. It is possible that individuals participating in a research or life experience may be influenced to present themselves positively due to factors of general suggestibility or perceived desirability. In order to be aware of such a possibility, the Marlowe-Crowne Social Desirability scale was employed in this research. It is hypothesized there will be no effects of desirability on other test scores.

Hypothesis I: There will be no significant correlation between the Marlowe-Crowne Social Desirability scale and selected test scores generated in this research.

Data Collection and Statistical Analysis

Data were collected one week prior to and one week after treatment. It was anticipated that the interval after treatment would allow subjects time to integrate the effects of treatment. A longer follow-up period was made impractical by the departure of subjects. All testing procedures were standardized. All data were coded at testing sessions to prevent ready identification of subjects' materials. Testing sessions lasted approximately two hours each time.

For a bulk of the data, the research design employed in this study is of the pretest-posttest control group

variety. Campbell and Stanley (1963) cite this design as one of the "currently recommended designs in the methodological literature" (p. 13). For the barrier/penetration scores, DAP ratings and semantic differential scales, analysis of covariance (ANCOVA) was the statistical test of choice within this design. Campbell and Stanley state that ANCOVA with pretest scores as the covariate is preferable to simple gain-score comparisons. Winer (1971) cites a number of factors which create difficulties in using simple change scores. The use of ANCOVA in this research is supported by two major consideations. First of all, the subjects in this study were not randomly assigned to the three groups. Thus there was no basis for assuming the groups would be similar on pretest scores, which would confound differences between the groups on posttest scores. By holding the prescores constant, ANCOVA procedures account for this contingency. Secondly, this is basically an exploratory project, designed to probe for possible effects of the treatment modalities under investigation. While less powerful techniques are available, Bancroft (1968) notes that ANCOVA provides a more sensitive test of significnace, which is compatible with an exploratory approach.

Inasmuch as the groups were not randomly assigned, the assumptions of analysis of variances were not strictly met. This is a problem encountered in clinical research, where it is often difficult to randomly assign subjects to treatment groups. However, as Winer (1971), Kirk (1968) and others in

the field of experimental design point out, these variance techniques are quite robust statistical procedures with respect to violation of the assumptions of their mathematical derivations. Kirk (1968) states that "departure (from normality) will have little effect on the probability associated with the test of significance" (p. 61). Use of ANCOVA has the advantage of providing a more stable estimate of the population variance and of reducing the number of statistical tests required, which strengthens the meaning of any statistically significant findings in the research (Guilford, 1965). Thus it was decided to employ the ANCOVA with an awareness of its limitations in this instance.

When the overall variance was found to be significant, the data was then explored to find the source of effects using the least significant differences (LSD) test for multiple comparisons.

Data from the Life Effects Questionnaire (LEQ) were analyzed with the Kruskal-Wallace one-way analysis of variance for ordinal data. The number of positive responses (3's) was counted for each subject. The subjects were then ranked accordingly.

The Spearman Rank Correlation Coefficient was employed to measure the relationships between the Marlowe-Crowne Social Desirability scale and other tests used in the research process.

Programs for data analysis were drawn from the Statistical Package for the Social Sciences (Nie, Hull, Jenkins, Steinbrenner, and Bent, 1970). Data was processed by an

IBM 370 at the University of Florida Computer Center. Ronald Marx, Ph.D., of the Biostatistics Department at the University of Florida provided statistical consultation for the project.

Pilot Study

A pilot study was conducted on two persons who began and completed rolfing prior to the study. While no systematic analysis of the data was performed, initial impression from the data were encouraging and provided important feedback in the development and format of the measures and scales used in this project.

"Efforts without results are wasted efforts."

- J. Powers, Coach

"Efforts without expectations are results."

-Warren, Engine House No. 9

CHAPTER IV

RESULTS

This chapter is a concise presentation of the results of statistical procedures outlined in the previous chapter. Each hypothesis is stated, followed by statistical findings and appropriate statistical tables. A presentation of the self-report inventories follows the statistical reports.

Statistical Findings

Barrier/penetration Scores

Hypothesis I: There will be a significant difference in the means of barrier scores for the treatment and control groups.

Hypothesis II: There will be a significant difference in the means of penetration scores for the treatment and control groups.

These hypotheses were evaluated by means of analysis of covariance. Results of analysis indicate there are no significant differences among the groups. There is a weak trend ($F = 2.53$, $p < .10$) seen in the data, in which the barrier scores of the control group are higher than the scores of either the rolfing or Gestalt groups. Table VI presents these findings.

TABLE VI

Comparison of Groups on
Fisher's Body Image Variables

Variables	Rolf		Gestalt		Control		F-Ratio
	Mean	SD	Mean	SD	Mean	SD	
Barrier	7.50	3.25	6.30	3.74	9.36	3.45	2.53
Penetration	3.86	2.48	3.90	1.29	4.57	1.60	.57

Body Chart

Hypothesis I: There will be a significant difference in the means of body rating scores for the treatment and control groups as measured by the following semantic differential factors:

1. evaluative;
2. activity;
3. potency;
4. hard-soft.

This will apply to six body areas rated as problematic.

Analysis of this semantic differential data for selected problematic body areas indicates that the null hypothesis was rejected in only two instances. The Gestalt group rated the face area as less positive on the potency dimension post-treatment ($p < .05$). The rolfing group rated the back area lower on the activity dimension post-treatment ($p < .01$). Considering the large number of analyses performed on this aggregate of data, these two findings may be viewed as a matter of chance occurrence and merit no further comment in themselves. The approach used in the body chart is considered in the discussion section. Results of analysis are presented in Table VII.

Self/Body Concept

Hypothesis I: There will be a significant difference in the means of the treatment and control groups for actual/ideal psychological self as measured by the semantic differential.

Hypothesis II: There will be a significant difference in

TABLE VII

Comparison of Groups on Semantic Differential Ratings of Body Areas

Variables	Rolf		Gestalt		Control		
	Mean	SD	Mean	SD	Mean	SD	F-Ratio
Neck							
Hard-soft	3.50	1.09	3.80	1.14	3.64	1.14	.36
Evaluative	7.21	3.12	6.50	1.58	5.57	2.14	.14
Potency	3.57	1.40	3.10	.57	2.86	1.03	.17
Activity	6.71	1.82	6.60	2.22	5.86	2.03	.48
Face							
Hard-soft	3.71	1.14	3.70	1.77	3.71	1.82	.70
Evaluative	6.86	3.18	6.80	2.39	5.79	2.36	.74
Potency	3.27	1.64	3.50	1.58	3.00	1.36	4.50*
Activity	6.64	1.69	6.30	2.00	5.36	1.91	1.05
Back							
Hard-soft	3.64	.84	3.30	1.34	3.27	1.49	.26
Evaluative	6.43	2.85	7.10	1.79	5.36	2.10	2.04
Potency	3.29	1.07	3.20	.92	2.57	.85	.50
Activity	6.27	1.77	7.60	1.27	6.00	2.04	5.99**
Abdomen							
Hard-soft	4.57	1.34	4.00	1.50	4.14	1.75	2.80
Evaluative	7.14	3.06	7.20	2.30	6.43	2.03	.21
Potency	3.43	1.65	3.50	.85	3.29	1.20	.16
Activity	7.21	1.81	6.70	1.42	6.36	1.65	.03
Chest							
Hard-soft	3.79	1.05	4.00	1.56	3.71	1.82	.07
Evaluative	6.00	2.48	8.10	2.77	5.57	1.78	2.45
Potency	2.93	1.21	3.80	1.14	3.36	1.34	3.00
Activity	6.50	1.70	7.60	2.01	6.77	1.42	1.66
Shoulder							
Hard-soft	3.71	.99	2.90	1.29	3.07	1.49	.61
Evaluative	6.21	2.49	6.40	1.96	5.43	1.91	.55
Potency	2.86	1.17	2.90	1.20	2.57	1.22	1.02
Activity	6.86	1.66	6.14	1.96	6.10	1.97	1.25

*$p < .05$

**$p < .01$

the means of the treatment and control groups for actual/ ideal bodily self as measured by the semantic differential:

1. evaluative;
2. activity;
3. potency;
4. hard-soft.

Analysis of the semantic differential self-concept data reveals that the null hypothesis was rejected in one instance. For the perception of ideal self, results indicate that, in comparison with the rolfing and control groups, the Gestalt group rated itself as significantly lower on the potency dimension of the semantic differential ($p < .01$). In addition, there were two statistical trends which did not reach significance. The rolfing group rated itself as softer on the post-treatment measure of present self-concept ($F = 3.04$, $p < .06$). The Gestalt group rated ideal self lower on the evaluative dimension at the time of the posttest ($F = 2.59$, $p < .09$). However, the only statistically significant finding for this section is the Gestalt group's decreased rating of ideal self on the potency dimension. This is discussed in Chapter V. Table VIII shows the results of analysis for the self-concept data.

Analysis of the body-concept data indicates one instance in which the null hypothesis was rejected. For the body-ideal, the rolfing group rated itself significantly softer on the hard-soft continuum than the other two groups ($p < .05$). There were no other findings of note. Table IX

TABLE VIII

Comparison of Groups on the Semantic Differential Self-Concept

	Rolf		Gestalt		Control		
Variables	Mean	SD	Mean	SD	Mean	SD	F-Ratio
Self-Concept							
Hard-Soft	4.86	1.10	4.80	.92	4.57	1.22	3.04
Evaluative	2.98	1.03	2.97	.71	2.81	.76	.03
Potency	3.68	.80	3.75	.72	3.36	.75	.43
Activity	3.62	.83	3.30	.92	3.14	.98	1.13
Self-Ideal							
Hard-Soft	4.43	1.28	4.60	.84	4.07	1.49	1.45
Evaluativ	2.19	1.04	2.50	.88	1.88	.48	2.59
Potency	2.68	.60	3.55	.98	2.75	.83	5.67*
Activity	4.02	.76	3.10	.88	3.36	.86	.94

*$p < .01$

TABLE IX

Comparison of Groups on the Semantic Differential Body Concept

	Rolf		Gestalt		Control		
Variables	Mean	SD	Mean	SD	Mean	SD	F-Ratio
Self-Concept							
Hard-Soft	4.21	.97	4.50	1.08	3.93	1.54	.47
Evaluative	3.14	1.26	3.60	.89	2.81	1.12	.48
Potency	3.61	1.20	4.00	1.14	3.21	.99	.31
Activity	3.69	.79	3.53	1.02	2.95	.78	.58
Body-Ideal							
Hard-Soft	4.07	1.21	3.30	1.34	3.29	1.59	3.50*
Evaluative	2.31	1.17	2.30	.84	1.93	.66	.07
Potency	3.03	1.03	3.05	1.14	2.61	.81	1.28
Activity	4.05	.81	2.97	.73	3.02	.78	1.25

*$p < .05$

presents the results of statistical analysis for the body-concept data.

Draw-A-Person

Hypothesis I: There will be significant differences in the means of human figure-drawing ratings for the treatment and control groups along the following dimensions:

1. expressive gesture;
2. amount of detail;
3. postural attitude;
4. spatial balance;
5. structural balance;
6. evaluative impression;
7. subject satisfaction with drawing.

Analysis of the DAP ratings indicates that the null hypothesis was rejected for two dimensions. DAP-4, spatial balance, reflects the arrangement of the drawing on the paper. For this dimension, the Gestalt group showed an increase while the control group decreased. The difference between the groups was significant ($p < .05$). The inter-rater reliability for this dimension is reported at .93. For the dimension of structural balance (DAP-5), the rolfing group showed an increase while the control group decreased. This difference was significant at the .05 level of probability. The inter-rater reliability for this dimension is .92. None of the other dimensions were significant, though the Gestalt group demonstrated a trend in the direction of increased detail in its figure drawing ($F = 2.48$, $p < .09$). Table X

TABLE X

Comparison of Groups on
Draw-A-Person Dimensions

	Rolfing		Gestalt		Control		
Dimension	Mean	SD	Mean	SD	Mean	SD	F-Ratio
DAP-1	0.40	2.17	0.14	1.70	0.86	1.88	1.33
DAP-2	0.50	0.97	0.14	1.51	0.57	1.02	2.48
DAP-3	0.70	0.67	0.86	1.61	0.14	1.75	1.78
DAP-4	1.00	1.33	0.57	1.34	0.29	1.14	3.28*
DAP-5	0.20	1.14	1.21	1.53	0.29	1.69	3.71*
DAP-6	1.00	1.13	0.36	1.88	0.14	1.29	1.06
DAP-7	1.70	1.34	1.36	1.65	0.71	1.64	1.25

*$p < .05$

shows the results of statistical analysis for the DAP dimensions.

Life Effects Questionnaire

Hypothesis I: There will be a significant difference in the mean of positive change scores of the treatment and control groups for LEQ I: Behavioral Events.

Hypothesis II: There will be a significant difference in the mean of positive change scores of the treatment and control groups for LEQ II: Psychological Sense.

Data from the LEQ were tested by means of the Kruskal-Wallis one-way ANOVA for ordinal data. Results of analysis indicate that LEQ I positive-change scores were not statistically significant for any of the three groups. There is indication of a strong trend for both the rolfing and Gestalt groups ($p < .06$), though it did not attain statistical significance. The mean of the ranks was 21.6 for the rolfing group, 24.1 for the Gestalt group, and 14.1 for the control group. Analysis of LEQ II scores was statistically significant ($p < .001$). The control group reported significantly fewer positive psychological change than did the rolfing and Gestalt groups. The mean of ranks was 27.6 for the Gestalt group, 23.7 for the rolfing group, and 9.6 for control subjects. Table XI demonstrates these finding.

Marlowe-Crowne Social Desirability Scale

Hypothesis I: There will be no significant correlation between the Marlowe-Crowne Social Desirability Scale and selected test scores generated in this research.

The Spearman Rank Correlation Coefficient was obtained

TABLE XI

Kruskal-Wallis ANOVA for LEQ I and LEQ II

Test	N	Group	Ranked Totals	Mean of Ranks	X^2
LEQ I	14	Rolfing	303.0	21.6	.10=4.6
	10	Gestalt	240.5	24.1	.05=5.99
	14	Control	197.5	14.1	.05=
Kruskal-Wallis value is H = 5.52					
LEQ II	14	Rolfing	331.5	23.7	.001=13.82*
	10	Gestalt	275.5	27.6	
	14	Control	134.0	9.6	
Kruskal-Wallis value is H = 18.73					

for the Social Desirability scores and barrier, penetration, LEQ I and LEQ II scores. None of the correlation coefficients is significantly different from zero. Table XII demonstrates these results. Thus no significant relationship was found between the Social Desirability Scale and other selected test scores.

Nonstatistical Findings and Impressions

While no systematic method was used to analyze the self-report inventories, several themes emerged from the subjects' reflections on their rolfing and Gestalt experiences. Most salient is the highly positive nature of most of the written accounts. There is a feeling of excitement conveyed in the words, a sense that one has lived through a valuable experience. One Gestalt member phrased this experience as "a new light inside of me." It is interesting to report that this animated quality was also evident to the researcher in the post-treatment testing sessions.

Two additional themes that appeared in the reports are an increased awareness of body processes and an ability to focus one's energy and attention more effectively. This increased awareness of one's body includes moment-to-moment sensations ("I feel the pencil in my hand"); feeling and emotional states, the experience of being in touch with the earth or being grounded; and enhanced awareness of movement. Some individuals clearly linked their somatic experience with a unified sense of mind and body. This unified sense seemed to engender a present-centered orientation. Sub-

TABLE XII

Correlations for Social Desirability

Test	Barrier	Penetration	LEQ I	LEQII
	-.005	.269	-.003	-.228

jects reported that a "here-and-now" stance has facilitated an ability to deal with their present life-situation in a more satisfying and effective manner. This seems to include general problem-solving as well as activities such as playing one's guitar.

Persons also indicated their anticipation that the recent awareness and excitement would continue in the future and serve as a basis for new learning and growth. The self-report data are integrated with the discussion section of the next chapter. Selections from the self-report inventories are presented in Appendix B.

"Form, slowly moving, subtly changing
form
Within which the ecstacy of my soul
unfolds
As the slow beating wings of a giant
bird."

- from Dance of Life
by Bebes Medicine-Eagle

CHAPTER V

DISCUSSION AND CONCLUSIONS

In previous chapters, a variety of thoughts on the role of the body in the therapeutic process were presented. Specific hypotheses were formulated and tested on three groups. One group was involved in rolfing, one in Gestalt therapy, and the other was a nontreatment control group. This chapter provides space for a discussion of the meaning and implications of the research findings.

Discussion

Barrier/Penetration Scores

The barrier and penetration dimensions were employed in this study because they offered an attractive inroad to the domain of body image and personal somatic experience. From a theoretical stance, as one develops a more integrated and adaptive image of the self, it is expected that barrier score will increase and penetration will decrease. The exploratory hypotheses were designed to test this theory.

However, analysis of the barrier/penetration data generated no statistical significance. The present data do

not indicate that there was any shift in body experience as a result of therapies based in a somatic and holistic approach. At the very least, such a shift was not detectable through analysis of inkblot responses. There was a slight pre/post increase in the mean barrier score for the rolf group and a slight decrease for the Gestalt group. This direction can also be supported by the barrier theory as constructed by Fisher (1970), for he suggests that barrier should increase with an intensified awareness of the muscles and skin, which is clearly the focus of rolfing. Likewise, an increased awareness of inner sensation, which the Gestalt approach emphasizes, is supposed to result in a decreased barrier score. The subtle shift in pre/post scores noted above, while theoretically appealing, is far from significant in statistical terms. In fact, it is the control groups' barrier scores which reflect the most noticeable change, which was reflected in a weak statistical trend. There is no ready explanation of this phenomenon.

One possibility is that the barrier/penetration system does not measure what it purports to measure. The voluminous work by Fisher (1970) does not support this possibility, although even in his work it appears that the barrier phenomenon is open to multiple interpretations in and around the theme of body image.

It is also possible that the experiences tapped by the barrier/penetration system are in the realm of core constructs, i.e., deeply rooted and central features of oneself. As Combs (1976)has pointed out,these constructs change slowly

with time and new experiences. From this perspective, it may be premature to assess barrier/penetration dimensions only one week after treatment is concluded, since a person's body image may still be in a state of flux and new development. A study of change designed to cover a longer time period would possibly find the barrier/penetration system a meaningful one. The ultimate question of whether rolfing or Gestalt therapy effects a change in body image and experience remains unanswered by this data.

Body Chart

During a guided awareness experience, subjects rated 21 areas of their body on semantic differential scales constructed for their relevance to somatic experience. Six of these areas were considered problematic by a majority of the subjects. However, analysis of the semantic differential ratings revealed no meaningful significance for any factor or body part. The rationale for this measure lay in the proposition that individual body areas were more or less in a person's awareness as a function of integration of a particular area/function into the total self-system. In his presentation of Gestalt therapy, Polster (1973) stresses the importance of dealing with these alienated body aspects and the psychological conflicts corresponding to them. It was anticipated that this data would serve as a map of personal somatic integration and that a shift toward a more positive, integrated topography would occur after the rolfing or Gestalt experience. However, there were only two instances which were statistically significant, a phenomenon which is well

within the range of chance occurrence. Nor was any meaningful pattern or trend indicated by these two findings. In the context of the present study, the body chart appears to be an insensitive guide through unmapped territory.

There are several possible explanations for this finding, or nonfinding as the case may be. It may be that the subjects in this study experienced no change in awareness of their bodies and thus indicated no change on this measure. The literature review and self-report inventories do not support this stand. Another possible explanation lies in the use of the guided awareness exercise. However, the practice of guided explorations through the body has been found useful in a variety of settings, from realization training to Gestalt therapy. A number of subjects also indicated they found this exercise personally valuable and physically relaxing. However, there was also consensus that the semantic differential scales were distracting and too numerous. Thus it is likely that subjects wearied of filling out the scales and consequently devoted less attention to this portion of the exercise. This procedural factor may account for the nonsignificant outcome for the body chart.

While the theory underlying this exercise appears valid, the scaling approach employed here did nothing to support or develop this theory. It is suggested that a more concise approach be used to aid subject interest and cooperation.

Self-Concept Measures

It was hypothesized that subjects would perceive themselves more positively in a psychological and somatic sense

after their involvement in self-enhancing therapies. Actual and ideal perceptions were measured on a semantic differential scale. Analysis of this data yielded some findings which were statistically significant.

As a group, Gestalt subjects rated their ideal selves lower on the potency dimension of the semantic differential than either the rolfing or control group. In terms of the polar adjectives used for this dimension, this finding means that Gestalt subjects ideally perceived themselves as softer, weaker and lighter than the other groups. Other than its patent meaning, this result is subject to an interesting interpretation: namely, a change in the "top-dog/under-dog" relationship. Perls et al.(1965) described the top-dog as the bullying, moralizing and authoritarian aspect of the person. Top-dog's usual comment is "you should." Under-dog relies on excuses and nominal acquiescence to subvert top-dog. The result is an on-going, unsatisfying conflict in the person. At the level of metaphor, the Gestalt group's lowered ideals may represent a weakening of top-dog demands to be hard, strong, and heavy. The person is able to be more self-accepting. The Gestalt group's trend indicating a lowering of evaluative concepts for ideal-self supports this notion. However, this is simply presented as a possible interpretation of this finding.

As for the body-concept measures, it was found that the rolfing group rated its body-ideal as significant softer than the other groups. This finding supports the original plan to separate the hard-soft adjective pair from the total potency

factor score. For the direct, often intense, body-work which occurs in rolfing is aimed at loosening rigid, bound-up areas of the physical person. Thus it is not at all surprising that persons undergoing rolfing might be attuned to the ideal of feeling softer and more flexible on a physical level. The rolf group's trend toward a softer concept of self corroborates this interpretation.

Inasmuch as the rest of the data in the self/body measures was not significant, it is also possible that the two findings presented are merely statistical flukes and therefore meaningless. The lack of significant findings in this section is something of a puzzlement. The retest session may have followed the end of treatment too soon to allow subjects to integrate changed aspects of themselves at a broad conscious level. The self-report data suggest this is not so. There is also the possibility that subjects were responding unfavorably to the demands of the semantic differential technique. There is no clear indication of the meaning of the problems with this particular measure. The interpretations rendered for the results may be viewed as speculative, tentative, but interesting.

Draw-A-Person

It was hypothesized that after treatment subjects would reflect some degree of change in their human figure drawings. The DAP process is presumed to yield an individual's projection of his body image. Raters were trained to assess six dimensions related to the drawings. Subjects also rated their

satisfaction with the drawings. Analysis of the data indicated that DAP-4 and DAP-5 were statistically significant.

DAP-4 is concerned with spatial balance, the arrangement of the drawing on the page. For this dimension the drawings of Gestalt subjects were appraised as being more balanced than those rendered by the control group. This is an interesting finding, for at a metaphoric level, there is a suggestion that Gestalt subjects perceived themselves more at the center of their world. The drawing is balanced within its context. This effect is totally congruent with a Gestalt approach, which seeks to facilitate expanded personal awareness of here-and-now reality.

DAP-5 rates structural balance in the drawing, i.e., the proportion and balance within the figure on the page. In this case, drawings of the rolfing group were seen as exhibiting significantly more structural balance than the other groups' drawings. This finding is consonant with the tenents of rolfing theory. A major objective of rolfing is to establish balance and order within the total personal system. Apparantly such balance and order is reflected in the rolfee's figure drawing and is observable by trained raters. The postural photos widely used in the rolfing process reflect a generally improved balance and symmetry in the appearance of the body. It is likely that rolfing subjects in this study were aware of such improvements and thus took more care in depicting structural balance in their figure drawings.

Both of these findings are interesting, almost poetic, in that they reflect the central therapeutic concerns of rolfing and Gestalt therapy. It would have been ideal had the barrier scoring been significant in the directions suggested by Fisher (1970). For awareness of surface and muscular sensation would have tied together with structural balance seen in the rolfing figure drawings. Likewise, the Gestalt drawings, centered in context, would harmonize with increased awareness of the inner world of sensations. As is clear, such was not the case. The appeal of the theory remains.

Fisher and Cleveland (1968) have suggested that human figure drawings might provide significant data on a person's body image. If this is the case, then the present research suggests that rolfing and Gestalt therapy effect positive changes in a person's body image. Specifically this is seen in the balance persons experience either in their physical structure or in relation to the world around them. The condition of being balanced has implications for more human living. Becoming balanced "has as its final aim the achievement of total coordination and harmony of mind and body, of man and men, of man and his environment" (Miller, 1974, p. 78). If, indeed, a new sense of balance is the experience of persons involved with rolfing and Gestalt therapy, there is good reason to assume that this sense will expand through the life-space and enhance the overall quality of life.

None of the other dimensions assessed by the raters was statistically significant. As for the rating procedures, raters achieved reliability scores well above the training criterion of .70 by time and actual research data was evaluated. The generally high inter-rater correlations support the notion that the DAP dimensions chosen for this study are readily observable. While not all the dimensions were significant along statistical lines, the value of such an approach to human figure drawings is supported. The use of raters and the fairly obvious nature of the dimensions rated would seem to minimize criticisms that might arise from more inferential or speculative DAP evaluations.

Marlowe-Crowne Social Desirability Scale

The nonsignificant correlations for the Social Desirability scale are an indication that participants in the study were offering genuine responses to the research items and were not responding to factors of social desirability or persuasion as measured by the SD scale. This finding enhances the results of psychological testing which have emerged as significant inasmuch as it offers a greater degree of confidence in the discussion of these results. However, the fact that the SD correlations were nonsignificant does not totally preclude the possibility that subjects were responding to a variety of influences in the rolfing or Gestalt experience.

It may be that there is an aura of expectancy surrounding an experience of this nature, and, if such is the case,

it is likely such an expectancy would contribute to a person's ultimate experience of a particular therapeutic modality. As Frank (1974) has clearly stated, personal expectation is a significant, if not essential, aspect of the healing process. It is my opinion that the SD scale, while of practical value, is not exactly designed for assessing such "para"-therapeutic factors as expectation. Perhaps a more fruitful avenue would be provided by an instrument or scale designed to assess a person's level of expectation before treatment begins.

Another approach lies in a device like the Sensation Seeking Scale (SSS) (Zuckerman, Kolin, Price and Zoob, (1964), which aims at measuring individual differences in optimal level of stimulation. Since the sensation-seeker is seen as needing more varied and complex stimulation, it is hypothesized that they have a higher optimal arousal level than nonsensation-seekers, and hence will volunteer for more unusual experiments. This hypothesis is supported by the high relationship found between sensation-seeking and volunteering for stress and hypnosis studies rather than questionnaire or general studies (Rosenthal and Rosnow, 1975). It is probably that persons seeking out rolfing or Gestalt experiences are in search of sensation to expand their experience of living. The SSS might provide an interesting profile on the group of persons involved in such growth experiences.

In any event, it is difficult to assess such expectations, and yet intuition suggests that they are at work.

This conjecture is supported in at least one subject's self-report in which he communicates a sense of disappointment in his rolfing experience since he expected it to embrace Gestalt work. This is an instance where a person's expectation tinged his experience negatively. It is quite as likely that the largely positive self-reports and the LEQ findings were partially inspired by an expectation that a positive experience was to be had. There is no empirical evidence to support this statement, however.

Life Effects Questionnaire

The LEQ was designed to assess the general effects of participation in a rolfing or Gestalt experience. The basic questions being asked were: do these therapeutic modalities make a difference in the daily activities and experiences of the people who participate in them: and are these differences noticeable to the participants. The LEQ I covered behavioral events such as basic physiological processes, motility, interpersonal relations, and levels of energy and attention. While neither the rolfing nor Gestalt groups reported enough positive changes in these areas to allow a statement of statistical significance, both groups demonstrated strong movement in a positive direction, a phenomenon which fits with the hypothesis originally stated for this measure.

The highly significant statistical findings of positive change in the psychological field is encouraging and further supports the meaningfulness of the trend noted for

the behavioral events. Subjects from the rolfing and Gestalt groups strongly endorsed their perceived change in a number of qualities which have been identified with mature and self-actualizing living. Subjects indicated that they felt significantly more aware of themselves. Part of this awareness involved a sense of being centered and balanced. Another aspect involved the feeling of being grounded, or having one's being solidly in touch with the earth. These groups also reported feeling more responsible and autonomous in their lives, as well as being more emotionally stable and oriented to their present experience. Last, but perhaps not least, persons indicated an increased sense of feeling at home in their physical bodies. These results suggest that both rolfing and Gestalt experiences provide individuals with a general feeling of well-being and a fuller experience on the psychological level. It is not inconceivable that, with a longer span of time, individuals would report more improvements in the behavioral arena as this enhanced inner sense manifested itself in more visible spheres. Certainly a longer-term study is desirable to assess whether this might be so.

Self-Report Inventory

The self-reports offered by the persons in the rolfing and Gestalt groups provide a medium for integrating results from the bulk of the research. These self-reported data offer supporting evidence for findings from the test-based data. The general tenor and content of the self-reports

have been presented in the preceding chapter. There is a positive enthusiasm running through the subjects' statements. These statements reflect an increased awareness of bodymind, psychophysiological processes. This increased awareness seems to have practical effects; that is, persons report they feel and operate differently in their day-to-day living. There is also an expectation that this personal excitement and awareness will continue and expand with further living.

Some considerations from Gestalt therapy seem appropriate here, for they mirror the kind of effects and experiences which the subjects in this study report.

> By working on the unity and disunity of the structure of the experience here and now, it is possible to remake the dynamic relations of the figure and ground until the contact is heightened, the awareness is brightened and the behavior energized; most important of all, the achievement of a strong gestalt is itself the cure.(Perls et al., 1965 , p. 232)

It would appear that the persons who participated in the rolfing and Gestalt experience accomplished the formation of a strong gestalt, achieving with this an "awareness of heightened vitality and more effective functioning" (Perls et al., 1965, p. 15).

Among the rolfing and Gestalt subjects there is some indication that somatic awareness is a factor in this heightened experience of life. This is not surprising in light of Merleau-Ponty's phenomenology presented in the introduction to this study. For the body is seen as an experimental context which allows order and meaning in one's

relationships with the world. As the body becomes more defined and organized in space, it follows that one's identity and sense of existence will reflect the quality of this shift. It is possible that the increased satisfaction and enjoyment which rolfing and Gestalt subjects report is at least partially a function of a more positively defined and harmoniously organized somatic space. Although limited in significance, the findings of increased balance in the DAP fits together with this conceptualization.

A final thought on the self-report data seems in order. This is not hard empirical data, nor was it gathered according to any methodological scheme. It is simply what the persons in this study say they experienced. While this type of report is subject to a variety of influences and perhaps distortions, it is a direct method and relies mainly on the honesty and good-will of the respondents. Given that all types of measurement are perilous to some degree, the face-validity variety can certainly be accepted within its limitations. Inasmuch as there was no overwhelming trend in the more experimental data of this study, the self-reports have contributed to an understanding of rolfing and Gestalt experience and provide a context for interpreting the limited research findings.

Conclusions

This study set out to investigate change and growth in the field of human living. It has been broadly conceived that the person is a unified, synergistic phenomenon

and that change in one dimension will be reflected in other dimensions. The focus in this research was the change and development which might occur after participation in the holistic, somatic-based rolfing and Gestalt experiences.

Change in body image, or the composite of feelings, attitudes and perceptions related to one's body, was of primary interest. The instruments employed to assess this aspect provide a scattering of intriguing clues. Ratings of figure drawings suggest that subjects experienced an increased sense of balance in themselves. For the Gestalt group this was more a sense of contextural or world-view balance; for the rolfing group, there was a distinct improvement in the structural properties of the soma relative to balance. Both findings suggest that a new personal, body-centered perspective might emerge after a somatically-focused therapeutic experience. The rolf group also envisioned its body ideal as being softer after rolfing. The other body-image measures failed to contribute anything which might develop a more comprehensive picture of change on a somatic level. Procedural and theoretical problems may be responsible for this.

In addition to somatic growth, there was a concomitant interest in development along psychological and general life-functioning lines. Data from this area emerged in a fairly consistent manner. The Gestalt group is seen as evolving a more comfortable self-ideal, one less caught up in the high-demand characteristics implied in the potency dimension of

the semantic differential. The psychological report from the LEQ and the subjects' self-reports create a consensus that the quality of life is enhanced as a function of participation in rolfing and Gestalt therapy. Persons reported feeling more aware, centered and balanced on a physical as well as psychological level. From a statistical point of view, it cannot be stated that on-going behavior was also enhanced. However, positive effects in daily living were reported by a number of subjects.

There remains the task of stating the more universal significance of this study: what does it mean--<u>really</u>. A fairly elaborate conceptual framework for a holistic, body-mind approach to human living and growing has been constructed. Within this framework, there was a decision to explore what might happen within individuals after they participated in a rolfing or Gestalt therapy experience, both of which are essentially holistic therapies. The results were then presented within the larger framework, and it was considered that people had experienced personal change. That is to say, on a moment-to-moment basis, on the plane of life as it is lived, persons were feeling, sensing, and, in some reported cases, interacting in a way they found satisfying and exciting.

In both the subjects' presentation of their data and in my own contact with them in posttest times, there was a quality of excitement and vitality, an <u>elan vital</u>, if you will. While this quality rarely achieved evangelistic-campground proportions in the group under study, persons

felt and appeared more alive and energized. In some instances, these experiences were more dramatic and visible, in others more subtle and discreet. An interesting phenomenon occurred with one man in the rolfing group. He reported an initial disappointment with his experience, even though he was feeling better after rolfing. Some weeks later, he called to report he was feeling progressively better and had elected to decrease anti-depressant medication he had been taking for a number of years. This is not presented as a testimonial to the effectiveness of rolfing or Gestalt therapy, which has not been established by this study, but simply as an indication that people feel better. Unlike the feel-better-fast mentality of aspirin advertisements, the sense of persons in this study was that of having made a beginning, of being in a personal space which was positive enough to allow movement—in large or small degrees—beyond the world of imposed expectations and demands into the world of trusting one's experience in living.

Earlier in the thesis, there was acknowledgement of the zeitgeist's influence on the process of therapy, reflecting as it does prevalent beliefs as to what constitutes the good life. It is at this level that the present study may find its widest meaning. Taking a sweeping view of history, Frank (1974) notes that societies in transition abound in small, face-to-face groups which serve, among other functions, to create values in the emerging culture. The humanistic movement, in which rolfing and Gestalt therapy are participants, has spawned a plethora of such groups in the last

decade. In terms of their synthesis of new values in western culture, these personal growth experiences may "be the most promising means of counteracting certain damaging features of contemporary life, especially alienation from the past and from one's fellow-man" (p. 264), not to mention from oneself. These therapies provide an opportunity for a person to grow beyond the limitations of current reality into the potential of his/her own personal reality.

At least a part of this reality is the individual's body, which is at stage center of the holistic schools. As Erikson (1950) noted earlier, the individual's body is trained to exist in the culture's space-time and is thus bound to the traditions of that culture, even as enforced by the dictates of conscience. In seeming response to this condition imposed early in life, it has been proposed that salvation lies in freedom from the inhibitions and restraints imposed by one's upbringing (Lowen, 1975), the freedom to create one's personal space-time, and enjoy the fullest possible life of the body.

The rediscovery of the body has been called humanistic psychology's most significant contribution to the advancement of therapy. The humanistic schools affirm that the pleasure of sensuous experience are legitimate and valuable (Frank, 1974). The present study includes data suggesting that the value of sensuous experience lies in the expanded awareness of here-and-now living. In contrast to the prevalent cultural emphasis on content, objectivity and external

goals, the holistic culture emphasizes awareness of process and experience, the how rather than the what of living. This development is having implications for the culture as a whole. For instance, the Leboyer approach to childbirth does not simply ensure that a child is born; rather, it teaches a positive, receptive and welcoming orientation to the whole birth process. At the other end of the known spectrum of human life, there is a growing realization that one has a claim to death with personal dignity. The ramifications are that one also has a claim to dignity in between the poles of birth and death, an opportunity to live a humane and joyous life at each moment of one's existence. This eventually turns one's awareness to the external and interpersonal world and a realization that all this is one's reality and responsibility as well. As Miller (1974) noted, awareness of one's personal ecology tunes one into the community and world ecology. Therapeutic experiences which provide the person with a unified sense of self pass through the Cartesian duality and revolutionize one's world-view. For mind is no longer separate from body; sensation becomes the experience of motion; person is in touch with person; person is in touch with nature, and all is ultimately one universe. Lose your mind and come to your senses.

Of course, these considerations do not flow directly from the data in this study. They are clearly an elaboration on a trend, a conceptual follow-up of things intimated along the way. It is impossible to claim that rolfing or Gestalt

therapy have caused any of the personal changes reported in this study. Frank (1974) notes the difficulty in assessing the extent to which the therapy per se is effective. Therapy simply serves to facilitate healing/growing processes that would probably have occurred in any case. Furthermore, it is possible that any number of approaches designed to expand awareness would provide the same quality of life noted by the rolfing and Gestalt subjects in this study.

Beyond speculation and causality, it remains clear that persons in this study who experienced rolfing or Gestalt therapy came to enjoy their experience and their lives. Perhaps it is best said that they learned to be subject, that is, participants in their own living and players in the inner game of life.

Limitations

There are several considerations which limit the extent to which these research findings can be generalized to other populations. The first consideration is the selection of subjects. Inasmuch as almost all of the subjects indicated involvement in previous growth experiences such as therapy, yoga, and meditation, the collective sample is different from one that might be randomly drawn from the general population. However, as was noted earlier, it may be assumed that the persons in this study are representative of the population interested in personal growth and development. Findings may be more relevant to this select group of individuals.

Another factor to be considered is the sample size. While adequate for analysis of group differences, the small number of subjects employed in this study restricts the confidence with which the results can be viewed. Significant results might well be considered simply as trends which merit further research with a larger sample.

Yet another consideration is the nexus of expectation and experimenter-effect. While the attempt to assess effects attributable to factors of social desirability and suggestibility was insignificant, this does not rule out the operation of such factors in the research. Observations suggest that relations between client and therapist/rolfer tended to be personalized, warm and supportive in this study. As has been indicated by the Rogerian school of therapy, the quality of the relationship is a significant variable in the therapeutic process and doubtlessly was a factor in this research. In addition, it is fairly clear that participants in these therapeutic endeavors expected to gain something of value as a result of their participation. Therapist qualities and client expectation, rather than being denied, need to be further explored as valuable and significant factors in growth interactions. It is not clear to what degree these factors were operative in this study.

The instruments used in the study were largely experimental, even when based in a standardized procedure like the semantic differential. The paucity of readily available measures necessitated this inventiveness. Subject feedback

indicated that some of the procedures were taxing. Nevertheless, some of the instruments were useful for the purposes of this study. The significant findings from the DAP support this method as a potentially useful instrument in a relatively unexplored field of measurement.

Recommendations for Research

There are several suggestions which merit consideration before further research is undertaken. The first of these concerns the barrier/penetration scoring. There has been a good deal of interest expressed in the use of this scoring system in the present research. Other researchers, particularly those involved in rolfing, have personally communicated their interest. After all is said and nearly done, this project would indicate that barrier/penetration scores have little to offer in expanding the understanding of body phenomena. The theory is attractive, but scoring system seems to lack any consistent or meaningful relation to the theory.

Inasmuch as this study has offered tentative support for the value of rolfing and Gestalt experiences, it is suggested that further research be carried on with larger groups of subjects. A more extended follow-up period, perhaps even a year, might well divulge more than is gleaned from relatively cursory approaches such as this one.

The final is simply a call to do more research in the area of personal growth and development. While adequate tools may be lacking and the myriad obstacles proposed by Murphy's

law always reach significance, there is and has been a personal satisfaction in sharing time and space with persons who are unfolding to their own perfection and beauty.

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APPENDIX A

RESEARCH FORMS

Body Segments for Body Chart

1. left foot
2. left calf
3. left thigh
4. right foot
5. right calf
6. right thigh
7. genital area
8. abdomen
9. chest
10. shoulders
11. left upper arm
12. left lower arm
13. left hand
14. right upper arm
15. right lower arm
16. right hand
17. neck
18. lower face: mouth and jaws
19. upper face: nose, eyes, forehead, scalp
20. buttocks
21. back

Body Chart Rating Scale

active 1 2 3 4 5 6 7 passive

soft 1 2 3 4 5 6 7 hard

awkward 1 2 3 4 5 6 7 graceful

hot 1 2 3 4 5 6 7 cold

healthy 1 2 3 4 5 6 7 sick

weak 1 2 3 4 5 6 7 strong

Self/Body Concept Rating Scale

weak 1 2 3 4 5 6 7 strong

passive 1 2 3 4 5 6 7 active

optimistic 1 2 3 4 5 6 7 pessimistic

hot 1 2 3 4 5 6 7 cold

calm 1 2 3 4 5 6 7 excitable

good 1 2 3 4 5 6 7 bad

hard 1 2 3 4 5 6 7 soft

heavy 1 2 3 4 5 6 7 light

Draw-A-Person Rating Scales

nonexpressive 1 2 3 4 5 6 7 expressive

plain 1 2 3 4 5 6 7 detailed

closed 1 2 3 4 5 6 7 open

unbalanced 1 2 3 4 5 6 7 balanced (I)

unbalanced 1 2 3 4 5 6 7 balanced (II)

negative 1 2 3 4 5 6 7 positive

LIFE EFFECTS QUESTIONNAIRE

Describe change in the following life experiences since the study began. If item does not apply, circle "no change."

Behavioral Events	Negative Change	No Change	Positive Change
Eating habits	1	2	3
Drug Use (alcohol, marijuana, etc.)	1	2	3
Smoking (tobacco)	1	2	3
Sleeping	1	2	3
Dreaming	1	2	3
Breathing	1	2	3
Elimination Functions	1	2	3
Digestion	1	2	3
Gross Bodily Movements (walking, running, etc.)	1	2	3
Fine Movements (Dexterity)	1	2	3
Verbal Behavior-Communication	1	2	3
Attention to physical well-being (exercise, diet, health care, etc.)	1	2	3
Sexual Behavior	1	2	3
Relationship with mate	1	2	3
Relationship with significant others	1	2	3
Response to Stress	1	2	3
Work Efficiency	1	2	3
Behavior when alone	1	2	3
Attention-Concentration	1	2	3
Activity Level	1	2	3
Energy Level	1	2	3
Feedback about self from others	1	2	3
Posture	1	2	3
Psychological Sense			
Self-aware	1	2	3
Centered, Balanced	1	2	3
Grounded	1	2	3
Responsible	1	2	3
Self-directed	1	2	3
Emotional Stability	1	2	3
Present-oriented	1	2	3
General Physical Comfort (feeling at home in body)	1	2	3

MARLOWE-CROWNE SCALE

T F 1. Before voting I thoroughly investigate the qualifications of all the candidates.

T F 2. I never hesitate to go out of my way to help someone in trouble.

T F 3. It is sometimes hard for me to go on with my work if I am not encouraged.

T F 4. I have never intensely disliked anyone.

T F 5. On occasion I have had doubts about my ability to succeed in life.

T F 6. I sometimes feel resentful when I don't get my way.

T F 7. I am always careful about my manner of dress.

T F 8. My table manners at home are as good as when I eat out in public.

T F 9. If I could get into a movie without paying and be sure I was not seen, I would probably do it.

T F 10. On a few occasions, I have given up doing something because I thought too little of my ability.

T F 11. I like to gossip at times.

T F 12. There have been times when I felt like rebelling against people in authority even though I knew they were right.

T F 13. No matter who I'm taking to, I'm always a good listener.

T F 14. I can remember "playing sick" to get out of something.

T F 15. There have been occasions when I took advantage of someone.

T F 16. I'm always willing to admit it when I make a mistake.

T F 17. I always try to practice what I preach.

T F 18. I don't find it particularly difficult to get along with loud mouthed, obnoxious people.

T F 19. I sometimes try to get even, rather than forgive and forget.

T F 20. When I don't know something I don't at all mind admitting it.

T F 21. I am always courteous, even to people who are disagreeable.

T F 22. At times I have really insisted on having things my own way.

T F 23. There have been occasions when I felt like smashing thing.

T F 24. I would never think of letting someone else be punished for my wrongdoings.

T F 25. I never resent being asked to return a favor.

T F 26. I have never been irked when people expressed ideas very different from my own.

T F 27. I never make a long trip without checking the safety of my car.

T F 28. There have been times when I was quite jealous of the good fortune of others.

T F 29. I have almost never felt the urge to tell someone off.

T F 30. I am sometimes irritated by people who ask favors of me.

T F 31. I never have felt that I was punished without cause.

T F 32. I sometimes think when people have a misfortune they only got what they deserved.

T F 33. I have never deliberately said something that hurt someone's feelings.

SELF-REPORT INVENTORY

Dear Folks,

It has been a couple of weeks since you completed testing for our research project. Sometimes it happens that tests and numbers fail to catch the fullness of your experiences. So, to round out the data, we are asking you to take some time and reflect on what has been happening with you.

I. Relate any events which provided personal learning and insight for you over the last several months. Particularly focus on the effects of your rolfing or Gestalt experience.

II. Briefly list and describe any other growth experiences you have had prior to this study.

Please follow your own judgement as to length. This is an important part of the study, so be honest, descriptive, and enjoy yourselves. Our thanks to you.

APPENDIX B

SELF-REPORT INVENTORIES

1. I learned how each and every part of me is related to one me, which I'm more in touch with. . . . This one me is grounded and centered and able to respond and grow and create. Even when I'm not feeling whole, I've learned how that feeling is a part of the whole. I've become much more satisfied with me where I am and much more excited about growing - more in touch with the possibilities without splitting myself up by making them expectations. In short, I'm understanding and being more in the here and now. What can I do now with what I'm seeing, learning, experiencing . . . ?

2. My guitar playing came together on a Friday after Gestalt class and I feel that it was due to a class experience.

3. This Gestalt class has turned a new light on inside of me. The light tells me to listen to what my body and mind are telling me. After all, they know me better than anything else. I have found a new sort of peace of mind since I discovered this, and I feel a lot happier. I've opened up to people that I want to learn more from. I'm thankful for so much learning!

4. I've learned how to be more myself and that there's no reason to be scared of not knowing something in front of other people. Gestalt has brought my self-concept up. I've also learned that dreams really do relate to reality.

5. An awareness that for me is related to Gestalt experience is my resistance to what I believe is unnecessary work, so I chose not to invest any more energy in answering this question.

6. Gestalt training has helped me become much more aware of my body and my feelings such as anger and sadness. It has helped me to know that I can do something about me. I feel and see here and now. I am much more aware-like now I feel the pencil in my hand. . . how hard it is, the smoothness of the paper, the outside. I have changed and am aware that I have a lot more growing and changing to do!

7. I have noticed an increase in body awareness. I'm feeling more down to earth, more in touch the ground under me and my relation to it. I have the feeling of a greater sense

of energy and have been able to use my energy that is available in a more creative and less wasteful way. My approach to problem solving is more practical and realistic than in the past, when I was more emotional and idealistic. I am aware of still going through noticeable change in my body.

8. I have a strong inside feeling about being rolfed which seems to pour out in my actions. The feeling of being rolfed sort of awakens me. I thought I couldn't endure some of the pain, but after each time I felt more alive. There is a much more even flow in my body. My weight seems to be more distributed. Movement is so neat to be conscious of. Dancing has meant more to me. I feel I am getting more out of everyday experiences, which makes me much happier. Since my body has opened up, so has my mind. Rolfing has enabled me to change consciousness and handle situations more maturely and responsibly. I seem to use less energy and feel more at ease by dealing with things differently.

9. New insights occur so frequently these days that I feel like a walking pinball machine! Since being rolfed, these general changes have been noticeable. I am taking pleasure in walking from one place to another. Heretofore, I had more or less ooozed and hoped no one would notice me. Now, I am aware of my movement and feel a new assertiveness and pride in my presence. I am also eager and willing to share my feelings and wants, especially with my husband. In general, I am able to speak up and say waht I'm really feeling and also confronting behavior in others rather than letting it go by.

10. My rolfing experience was rather disappointing. I had a very brief glimpse of rolfing at Esalen and was under the impression that it contained some pretty intense Gestalt work. The rolfing experience itself has made me additionally aware of my body, and I believe it did contribute to improving my carriage and over-all appearance. It has also helped my depression.

11. My body is not perfect, yet I feel so much more aware of what's going on in my body, which tunes me in on what's going on emotionally as well. It is hard to find words to describe my experience of rolfing . . . . I feel more united with my body, at home, comfortable . . . . I feel at one with my body. Overall, rolfing has been a valuable experience for me. I feel like a lot of the changes are so subtle and natural that I'm not fully aware of how much different I am. Also I've been realizing I miss going to be fixed each week. For so long I've been having something done to me. It is a sharp switch to know I need to be the one actually taking steps to maintain my condition now. Again, it is difficult to be specific. I can only say that my sensitivity to and awareness of my body, emotions and the environment around me were increased by rolfing.

12. There was little dramatic during or since my rolfing. Nevertheless, there were some things below the dramatic.I have experienced a greater and more consistent sense of well-being than ever before in my life, and during this whole time I knew that I would be out of work in June. I was also divorced recently after 17 years of marriage, which was quite a difficult change. I am convinced that rolfing has helped me to be more complete and more thoroughly a person, no matter what happens in the world or to me. When Rick was working on the fascia of my lower back and across my buttocks, I felt that I had used my legs and feet to kick people in order to get information from them or merely for my own pleasure. I am not so violent today, although this experience has led me to understand a great deal of my present personality in which there are still traces of this former person. As for the rest, I am straighter, more grounded, more centered, milder, and almost without trouble with a previously chronic lower back problem.

BIOGRAPHICAL SKETCH

Joseph Michael Long was brought into the light of day on April 5, 1947, in St. Louis, Missouri. By virtue of this event, he is an Aries and a Midwesterner. Growth, play,and learning occurred on the banks of the Mississippi and in the surrounding hills. Graduation from St. Louis University culminated his plains academic experience. Then, lured by sunshine and higher education, he moved to Gainesville, Florida, where he attended the University of Florida. In this setting, he learned much of life, love, and good people, plus developing a passion for tropical sunsets. Currently, he resides in Tacoma, Washington, in full view of Puget Sound and the Olympic Mountains. The sunsets, while not tropical, are exquisite. He views them with Diane, his companion of many years, Dulcinea the cat, and whomever else turns their eyes to the west.

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

Vernon Vanderiet, Chairman
Associate Professor of Clinical Psychology

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Hugh C. Davis
Professor of Clinical Psychology

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Richard Swanson
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Norman N. Markel
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This dissertation was submitted to the Graduate Faculty of the Department of Psychology in the College of Arts and Sciences and to the Graduate Council, and was accepted as partial fulfillment of the requirements for the degree of Doctor of Philosophy.

August, 1977

Dean, Graduate School